

The Bulletin of the Department of Secondary-School Principals of the National Education Association

VOLUME 22

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SERVICE ORGAN FOR AMERICAN SECONDARY SCHOOLS

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RELATIONSHIP BETWEEN SECONDARY SCHOOL
AND COLLEGE*

ROBERT H. TUCKER

Dean, Washington and Lee University

In an article in the *Journal of Higher Education* a few years ago, Charles A. Beard relates that a music hall wit in London brought down the house one evening by remarking in typical English drawl: "Darwin told us where we came from, Conan Doyle told us where we are going, and now if Stanley Baldwin will tell us where we are, I'll buy him a new top hat."

With respect to the educational system of the United States most of us are beginning to see where we came from. We can understand and appraise perhaps the major forces which have been at work. Few of us know just where we are or what the ultimate goal will be. Personally, I do not claim to be one of these few. My only claim to the right of expressing even a hesitant opinion rests upon the fact that my own professional life has been about equally divided between state educational institutions and privately supported institutions and that it has included some years spent as a teacher in secondary schools.

We have been passing through a period of far-reaching social change. Like all other social institutions, college and secondary school are plastic agencies, making their contribution to social progress, but, in turn, responding to the changing interests, needs, and capacities of the society which surrounds them and, in last analysis, provides their support. Eternal verities are probably no less rare in education than in other fields of human endeavor.

Colleges and secondary schools are confronted with many perplexing problems. It is no exaggeration to say that the most serious of these problems arise from the rapidity with which the educational sys-

*Address delivered at the joint session of Colleges and Secondary Schools, annual meeting, Virginia Education Association, Richmond, November, 1937.

tem has developed. It seems incredible that the number of students in higher educational institutions should have risen from 237,000 in 1900 to more than a million in 1934. It seems more incredible that the number of students in public high schools should have risen from 519,000 to more than six million in the same period. While there has recently been some decrease of enrollment in the elementary school, enrollments both in colleges and secondary schools have continued to increase since 1934.

In other words, we are conducting in the United States an experiment in mass education without precedent in any other country or time. The founding fathers, we recall, laid down the principle in the Ordinance of 1787 that "schools and the means of education shall forever be encouraged for the promotion of good government and the happiness of mankind." This is the principle on which our democracy was built. It is the only principle on which it can hope to survive.

Forty years ago, in the South at least, educational debate was centered upon the question whether it was the duty of the state to provide free education beyond the elementary school. To-day few question the wisdom of providing a well-rounded high-school education for all at public expense. Secondary education is now being provided for six million pupils. Apparently it will eventually be provided for ten million or more. Indeed, some of the state universities, through the establishment of curricula for students who are unable to carry the regular college work, are bringing sharply to the fore the question of mass education at the college level.

The impact of all these forces has changed the face of the educational world in the short space of a single generation. The efforts of college and secondary-school authorities to meet the new conditions constitute one of the most interesting and creditable chapters in the history of American education. Certainly there was never a time when teachers and administrators were more constructively critical of educational organization and procedure, or more actively engaged in their improvement.

It would be a miracle if this growth had failed to result in many inarticulations in the educational system. These inarticulations have grown out of misunderstandings, conflicts of interest, duplication and other uneconomical practices, and failure to view the problem as a whole. The units concerned have been too independent in their purposes and too indefinite and variable in their procedures. At the present time, there is agreement only in a most general way as to educational programs and procedures. Particularly, there is still uncertainty as to the place and function of the different types of colleges and uni-

versities in the educational system and the relationship between these institutions and the secondary school.

The great need, therefore, is for a comprehensive, well-rounded and fundamentally justified educational program, a program which will correlate all grades of education at least to the extent that there shall be a straight and open pathway from the lowest to the highest grade. The needed coordination will not be attained by chance. It can be accomplished only through cooperative endeavor. The functions of the various parts of the educational system must be clearly differentiated and these functions must, after careful experimentation, be arranged in orderly sequence.

In this process the outstanding problem has been, and still is, the articulation of the work of the secondary school and the college. In this I do not refer, except incidentally, to the age-old controversy over the material content of preparatory and college courses. Recent experience has relegated this question to the minor place it deserves. I have in mind articulation in the broader sense of intellectual quality and purpose. In this sense, the question of articulation involves not only admission requirements and procedures, but also the underlying philosophy upon which our educational system is based. Concretely, it raises the question of the functions and responsibilities of the secondary school and the functions and responsibilities of the college.

I am well aware of the tendency in some quarters to regard the secondary school primarily as an instrumentality for preparing students for college. Personally, I have never been able to accept the idea that high-school work should be planned solely, or even primarily, with a view to satisfying the requirements for college entrance. Secondary schools are in the main committed to a much larger task, of which preparation for college is only an important phase. Nor have I been able to find adequate support for the notion that student failures in college are due primarily to the defects of earlier preparation. Failures in college involve many factors, including the vagaries of college teaching itself. The problem of college admission is a joint problem which can be met only by college teachers and secondary-school teachers working in a spirit of frank and open cooperation.

The problem of college admission is largely a problem of differentiation of students on evidence of interests, aptitudes, and capacities demonstrated in the earlier years of the secondary-school course. Ideally, education is a broad highway which every child has the right to travel in so far as his interests and capacities permit. Practically, individual differences cannot be overlooked. Uniform standards cannot be maintained in training human beings. We have learned by

trial and error the fallacy of attempting quantity production in education. Mass education at the college level may eventually be realized, but the day of its realization is far in the future.

These facts are already recognized by colleges and secondary schools. Most secondary schools require, very properly, one level of attainment for graduation and another level for recommendation to college; in other words, they have one grade for graduation and another higher grade for certification to college. Likewise, many colleges require that the candidate for admission shall have graduated with a certain rank in his class. With the possible exception of the general average of the student's grades, this is, for graduating classes of considerable size, by far the most reliable of the score or more criteria now in use.

Adherence to the principle of selection, or as Thorndike calls it, distribution in education, enables high schools to differentiate their courses in such a way as to meet the wide range of abilities possessed by pupils at this stage of their development. It also enables the colleges to specialize in aims and objectives and thus limit their work to the resources at their command.

The truth is that the present overexpansion in our educational system and the growing burden on the community can be reduced only by an intelligent policy of selection in secondary school as well as in college. Everyone recognizes that there are varying levels of human ability and varying levels of achievement. The educational system must be so organized as to meet the requirements in the most effective way.

The problem is thus closely connected with the philosophy upon which the educational system is based. This philosophy implies that education is the most powerful agency for maintaining and developing the social structure. In a democracy, education must train primarily for the duties and responsibilities of citizenship. Likewise, it must train for leadership, develop the more promising minds capable of analyzing conditions and directing the great majority.

As Briggs has well said, the task of education is twofold: (1) to teach people to do better the things they would attempt anyway, and (2) to teach them to do things they would not otherwise undertake—in other words, to comprehend the social heritage and to add something to it which may be passed on to future generations. The former is the central aim and function of the high school; the latter is the central aim and function of the college. The high school directs its energies primarily to the development of general education, cultural as well as vocational. The college accepts the task of training for in-

tellectual leadership. The fact that neither succeeds in accomplishing fully its purpose does not change the conditions or the essential relationship between secondary school and college.

Education should thus be thought of as a continuous, integrated process, but clearly it must be differentiated according to the needs and abilities of the individual as a member of the social group. In the elementary school, in the secondary school, and in the college, there is need of this differentiation. Completion courses should be provided for those who are unable to go on, whether the cause be economic limitation, lack of native ability, or other intellectual factors which cannot be overcome. Who then should go to college? Wilkins answers this question correctly and fully, I think, when he replies: "Every potential leader and no one else."

I need hardly add that the much-abused term **leader** is here used in a very broad sense. The man who organizes a great industry is as much a leader as the man who heads an army or the man who wins a place in the legislative halls of the nation. Likewise, the man who makes a useful invention, or discovers a new way of combating disease, or develops the means of analyzing the atom, or writes a great novel or poem, is, from the social point of view, a leader in the full sense of the term. The great problem is to discover potential leaders and further their development, to find more dependable ways of determining whether the student can profitably go on through secondary school and from the secondary school through college and how the work should be differentiated at each stage of his educational career.

It is natural that in meeting this elusive problem our methods have fallen far short of success. In our inability to measure the intangible elements which determine the student's success, we have been inclined to overemphasize the tangible, mechanical side—to measure everything by course credits and grades while self-discipline, character, personality, and general intelligence are really the decisive tests. The Carnegie units have served a useful purpose. They were introduced at a time when educational conditions were chaotic and almost any change was a step in advance. However, the tendency, until recent years, has been to make a fetish of units and course credits, to emphasize specific prescriptions while losing sight of the substance and the spirit. The need, as Learned has long ago pointed out, is for more flexible and more revealing standards. The real measure is not units, subjects, certificates, or examinations, but the actual progress made toward achieving the permanent ends of education.

The remedy is to be found not in the further expansion of our already overextended educational undertakings, but rather in the

simplification and refinement of our educational procedure and in the establishment of closer articulation between the different parts of the educational system. Particularly, there should be cooperative effort to relate secondary education to education in college, not unit by unit, nor credit by credit, but by what the individuals concerned know and can do and may be expected to accomplish in the college course.

In so complex a situation the solution is not to be reached through formulas. Several lines of procedure, however, seem to be desirable and clear:

1. Secondary schools and colleges should reach an understanding as to their respective aims and functions and revise their curricula with a view to eliminating unessentials and limiting their educational commitments to what they can accomplish in an effective way.

2. The secondary school should concentrate upon subjects and procedures which will be helpful to young people in developing aptitudes, skills, and powers necessary for resourceful and constructive living on the one hand and effective college work on the other. This implies the continuance and further development of curricula providing for general education, for college preparation, and for vocational training.

Completion curricula should be provided at convenient stages for pupils whose abilities and resources make it undesirable for them to pursue their academic studies further. There is even greater need for providing continuation courses in trade and vocational education for students of this type. Secondary schools have very generally failed to meet the full possibilities in this respect. Courses should be so arranged, however, that the doors of opportunity in the different types of education will be kept open as long as possible.

3. College curricula should be so organized as to articulate more closely with the secondary school and avoid the deadening effect of duplicating the secondary-school work in the freshman year. Colleges should concentrate upon the type of work best suited to their individual purposes and resources rather than attempt, as many now do, to cover the entire educational field. Again the doors of educational opportunity should be left open certainly to the end of the freshman year and if possible to the end of the sophomore year.

4. Both colleges and secondary schools should develop effective systems of educational guidance, under competent counselors, combined with carefully devised testing programs.

The guidance and testing program should be state-wide and should become the center of the entire educational program. It would

serve to winnow out the pupils each year and afford the information necessary for directing them into the courses best suited to their abilities and needs.

5. Cumulative records should be kept, containing not only grades and ratings, but as far as possible, a complete and accurate summary of the pupil's intellectual, physical, and emotional development, as well as his special aptitudes, interests, and limitations as indicated from year to year. A promising means for the attainment of these ends can be found in the tests and record forms now being developed by the Educational Records Bureau or the Cooperative Test Service of the American Council on Education.

6. Students should be promoted and directed in the secondary school on the basis of these records and admitted to college when the records indicate that they possess the requisite general intelligence, combined with well-defined interests and demonstrated ability to work in one or more of the fields in which the college offers instruction. The question of college entrance could thus be shifted from the quantitative to the qualitative basis. Specific subject requirements could be relegated to their proper place in the background.

The procedure here suggested involves increased expense, but it is entirely possible and feasible if colleges and secondary schools will pause in their programs of expansion and address themselves to the functions which lie clearly within their respective spheres. Unfortunately in educational affairs, as elsewhere, "no one lives content with his own lot, but rather praises those who follow other paths." High schools aspire to be junior colleges. Colleges cannot rest content unless they add at least some of the features of the university or the graduate school. Both seem to think that if they can expand their offerings upward and outward, the question of depth and thoroughness of work may well be left to take care of itself.

In the colleges, we are still obsessed with the notion that size and success are synonymous. The widening of knowledge has accelerated the multiplication of schools and departments and the introduction into the curriculum of hundreds of new courses, many of them not properly correlated, some of them not even clearly defined. In their desire to attract students, many of the colleges have assumed educational obligations clearly beyond their powers to fulfill. Some of them have unfortunately thought it necessary to make themselves into intellectual apothecary shops where every conceivable nostrum can be found.

Similarly secondary schools have tended to expand their curricula and to multiply in numbers beyond reasonable community needs. In

the United States, there are more than twenty-five thousand high schools, ranging in size from a mere handful of pupils to more than ten thousand, but it appears that seventy-five per cent of these schools register under two hundred pupils, while more than fifty per cent register fewer than one hundred. In Virginia, with a high-school enrollment of 115,964 and a land area of less than 41,000 square miles, there are 628 public high schools. Clearly there is need of consolidation of small high schools, as well perhaps as the breaking up of a few unwieldy city high schools. With the present means of transportation, approximately half the present number of high schools could serve all reasonable purposes more effectively and at a vast reduction of expense. The elimination of expensive duplication in this respect would release funds to meet the cost of providing not only effective guidance and testing programs, but the type of instruction which everyone agrees the high schools deserve to have.

All these factors serve to emphasize the need of taking careful stock of the situation and planning definitely for the future. The problems involved are, as I have said, joint problems, implying joint responsibility on the part of the colleges and the secondary schools. The solution can be found only in cooperative action. The great need is for mutual understanding of purposes, for clarifying objectives and agreeing upon lines of procedure which will enable schools and colleges to go forward more intelligently and more surely in the training and development of youth.

TRENDS IN THE JUNIOR HIGH-SCHOOL CURRICULUM

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The past decade has seen considerable modification of our thinking in the secondary as well as in the elementary fields of education. It is not my purpose to discuss at any great length the causes of these changes in the modern junior high school, but rather to consider the trends themselves. I shall, therefore, merely give mention to the underlying social and psychological factors which are largely responsible for the recasting of our educational philosophy in the secondary schools of America.

The changing nature of the social scene, with its implications for curriculum revision, has been made the theme of numerous educational conferences during the past few years. Out of this examination of society has grown a demand for a curriculum better suited to the needs of pupils living in a social and economic world greatly changed from that of a few years back.

At the same time, we have witnessed what almost amounts to a revolution in our thinking in the field of educational psychology. We have seen our cherished laws of learning battered to pieces by the onslaught of new experimental evidence, and a set of principles, based upon an organismic conception of growth, proposed as a guide to the learning situation.

While there is much apparent confusion in our educational philosophy and practice at the present time, certain trends in the development of the curriculum for the junior high school are becoming more and more evident. Among these are the following:

1. The so-called exploratory function of the junior high school is rapidly giving way to the concept of the junior high school as an institution for continuing the general education of youth coming up from the elementary grades. The idea that the junior high school is an institution with a purpose different from that of the other units of the public school system is no longer tenable. The value and need of the numerous short "exploratory courses," so common in the junior high school of a few years back, are being seriously questioned. With the passing of the time when the high-school youth, armed with a few years of vocational training in shop or commerce, could take his place in the industrial and commercial world, the necessity of exploratory courses as prerequisites to high-school vocational training has largely disappeared. The increased age at which the youth of the land can

hope to enter industry has raised grave doubts of the advisability of experiences in the life of the pupil, coupled with a demand for further vocational training before the last year of the senior high school. In those states where the junior-college movement has made considerable progress, there is a growing tendency to think of the junior college as the agency for vocational training for pupils not planning on a college career. The high school itself is, for most pupils, an institution of general education. Specialized vocational education is being pushed to higher levels. This trend relieves the junior high school of the necessity of emphasizing vocational guidance, and of preparing pupils to select their fields for specialization in the senior high school. While it is desirable for the junior high-school pupil to give serious thought to vocational plans and to have a vocational goal in mind, an increasingly large number will make final plans for vocational education during their senior high-school years.

2. The growing complexity of modern social and economic life in our democracy has caused growing concern over the low degree of social intelligence on the part of the adult population. At the same time, we are becoming convinced that the traditional school curriculum is, at best, ineffective in educating for intelligent social participation in that democracy. This is especially true of the more academic areas of the junior high-school curriculum where important modifications are being made. One of the most significant trends is the development of what is generally termed, for want of a better name, a **social-living core**. This area of the core curriculum, growing out of real life experiences of the learner, is dedicated to the ends of developing better integrated individuals—citizens better able to adjust themselves to the changing nature of our social and economic environment; citizens able to lead reasonably happy and worth-while lives as participating members of our democracy; citizens with a better understanding of the problems of that democracy, and a determination to work out equitable solutions compatible with the ways and ideals of a democracy.

In general, this "social-living core" is being developed on a twelve-, thirteen-, or fifteen-year basis, depending on whether a particular city, county, or state begins public education at the kindergarten or first-grade level, and ends it with the senior year in high school, or continues it through the junior college. A well-articulated sequence of experience units, developed around a central theme, or growing out of a so-called center of interest or activity area is suggested for each year or group of years. In general, these suggested units emerge from what have, in the past, been thought of as the social studies and science areas of learning.

The units of the social-living core are integrative in nature, and generally consume from one third to one half of the day in the elementary school. In the secondary school, there is a growing tendency to develop at least one fairly long period during the school day in order that real experience units may be developed. This period is usually obtained by combining the social studies and English periods to form a two-hour period for the social-living core. In some cities, this two-hour period runs through both the junior and senior high school, while in other cities it is shortened to a one-hour period during the junior and senior years. A number of cities are experimenting with the development of a three-hour period at the junior high-school level. It is very likely that the next decade will see all of the pupils in many of our junior high schools under one teacher for at least half of the day. Such an organization has many advantages aside from the opportunity offered for developing real experience units in the social-living core. Not only is oral and written expression placed in more functional situations, but many other activities of the present English period become more purposeful to the pupil.

3. Junior high schools are becoming more and more conscious of their responsibilities in developing a guidance curriculum that will really function. There is a definite trend toward making guidance an integral part of the social-living core, with each teacher of this area of the curriculum charged with the responsibility of being friend and counselor to every pupil enrolled in his class. There is a growing realization that if we are to give intelligent, and effective social, educational, recreational, and health guidance, as well as some vocational guidance to the pupils of the junior high schools, the total teacher-pupil contacts must be drastically cut, and the time of these contacts greatly lengthened. Even though a real social-living core is not developed, the two- or three-hour period under one teacher can well be justified if we can provide a situation where guidance can function. The two-hour period cuts in half the total teacher-pupil contacts and doubles the time of contacts. The three-hour period triples the time, and cuts the number of contacts to one-third that under the single-hour periods. Such an arrangement, if teacher and school are so inclined, makes it possible for a teacher to get acquainted with his pupils and their home conditions, an arrangement which enables him to act intelligently as their counselor. The time is past when a single guidance expert, armed with records and reports, can be considered as giving effective guidance service to three or four hundred pupils. The concept of guidance has so expanded that it will be effective only as it becomes a part of the pupil's classroom curriculum, and as a large

number of teachers, each contacting his charges for fairly long daily periods, develop real guidance points of view.

A number of schools are experimenting with the idea of assigning to a teacher two or three entering seventh grade social-living classes, and allowing him to continue with these same classes through the three years of the junior high school. This movement has much to recommend it, provided that only the finest of our teachers—those who love and understand the early adolescent youth—are allowed to handle these classes. A teacher, to successfully discharge the responsibility of counselor for his groups, must be much more concerned with the development of wholesome personalities and well-integrated individuals than with the teaching of any body of subject matter. He must realize that modifications of pupil conduct and ways of thinking are, after all, the outcomes desired of the educational process, and that these can be accomplished only as the learner is really experiencing along desired lines. The guiding of pupil experiencing both in and out of school is the teacher's real responsibility, not the teaching of a subject.

If this movement towards a better guidance program, incorporated as it is in the core-curriculum movement itself, is to be successful there must be developed a real social-living curriculum throughout the school life of the learner. Many experiments are bogging down because of failure to do this. We have often failed to remember that learning is a growth process for the teacher as well as for the pupil. We have, in many instances, completely overwhelmed our finest teachers by suddenly thrusting upon them the responsibility for fusing English and social studies. The success of the whole integrative trend is dependent upon careful curriculum developments, together with continued teacher education, over a period of several years. A teacher does not become guidance-minded over night, nor does she learn to develop really fine units of work of an integrative nature except by continued experience in so doing. The whole movement is as much one of teacher growth as it is of curriculum and administrative reorganization.

4. For years, we have been giving lip service to the philosophy that the curriculum must be adjusted to the child; and, at the same time, we have been expecting most children of a class to read the same texts, to work the same problems in arithmetic, and to meet the same grade standards. True, we have segregated children into ability groups, and we have made provision for some electives, but we have done little to develop a curriculum fitted to the nature and needs of the different groups. During the past several years, there has been increasing recognition of the nature of individual and trait differences, to-

gether with a definite attempt to develop a curriculum adjusted to these differences within and among children.

Grade standards requiring more or less uniform subject matter or skill mastery at each of the different levels of the school system are indefensible in the light of what is known of the nature of the child. As determined by standardized reading tests, the upper fourth of the pupils in the seventh grade of junior high school will have reading ages at least two years above those of the lower fourth of the pupils in reading ability. The same differences in ability will be found in arithmetic. Obviously, to expect all, or nearly all seventh graders to read and understand the same books or to understand the same arithmetic problems is expecting the impossible. Successful participation in the activities of the school is essential to the mental health of each and every child, yet we have set impossible tasks for many of our children, while others, due to their mental superiority, have been allowed to develop bad reaction patterns through lack of a challenging curriculum.

One of the most difficult problems of secondary education to-day is that of developing learning situations in which all pupils may successfully participate. The experience approach to education seems to offer a way out. An illustration will suffice to make this point clear. A certain eighth-grade class of unselected pupils is working with a unit on "Westward Expansion." In this group of thirty-five, the teacher should expect to find several with reading abilities no greater than those of average fifth and sixth graders, while others can easily read books written for ninth, tenth, and eleventh year students. The material written for grade-school pupils on the subject "Westward Expansion" can be read and understood by the lower ability readers of this group. On the other hand, the better readers can, and should, utilize some of the books on the same topic written for high-school students. All pupils can successfully participate in the reading activities of the unit if there is available a well-developed library with ample reading and visual materials of different levels of difficulty dealing with the theme of the unit. The opportunities for successful participation which result from excursions; creative and appreciative art, literature, and music; construction; research and other types of activities growing out of a unit of work enable each and every pupil to make a valuable contribution to the work of the group and to experience satisfaction in so doing.

It is significant that publishers are beginning to recognize the need for materials which are of different levels of difficulty, yet which are written for pupils of the junior high-school age. A few excellently prepared books for the poor readers are already on the market, and others are in preparation.

After all, there are no set materials which every pupil must read, nor are there things which everyone must do in like manner. It is important, however, that each pupil make continuous growth in effective, democratic living. Reverting to the topic "Westward Expansion," this unit should result in all pupils gaining valuable experience in common undertakings, in social understandings, attitudes, and appreciations, and in essential abilities. It is neither desirable nor possible for all to have identical experiences.

Progress in the so-called fundamentals is, by the very nature of the abilities being developed, an individual matter. This does not imply completely individualized instruction in these areas. It does imply curriculum developments that would enable the pupil who comes to the junior high school with fifth-grade arithmetic achievement to continue from there rather than to be thrust into work entirely above his level of insight. We are beginning to face the plain fact that if the reading activity is to have much value for pupils, we must not only have a pretty good idea of the reading ability of each, but must make available materials suited to their reading levels. To be continuously forced to read too difficult materials is both discouraging and harmful to the pupil. Progress, as well as a wholesome attitude, depends upon much reading of materials which can be understood readily.

5. A trend, alluded to several times, is the growing recognition of the importance of creative and appreciative experiences in the curriculum. Not only are numerous junior high schools offering classes in creative writing, music, and art, but what is more significant, teachers and curriculum workers are seeing the possibilities for stimulating creative effort and developing appreciations in the regular classes. This trend is especially noticeable in the newer type social-living curriculum, where creative and appreciative activities become integral parts of the units of work. Some schools are freeing the music and art teachers for part of the day in order that they may work more closely with core teachers as situations demand. The motion picture and radio, long neglected in the public schools, are now receiving part of the consideration which they deserve. Some classes in radio and motion-picture appreciation are being developed. Many schools, however, feel that these agencies are so important in the lives of every pupil that they should occupy a place in the social-living core where all will contact them under school guidance.

6. Time does not permit a discussion of changes in all the areas of the junior high-school curriculum. Because of this, many significant trends will have to be omitted or dismissed with a few words.

a. There is an increased recognition of the importance of science experiences in the life of the pupil, coupled with a demand for further

breaking away from the bookish type of teaching so common in our junior high schools, and for the development of an experience curriculum more closely related to the life interests of the pupil. A few schools are experimenting with special classes for girls in the hope of being able to stimulate activities more nearly in line with their interests and experiences. In some instances science is being fused with English and the social studies during the first year or two, followed by a two- or three-year sequence of life science running into the senior high school. In such cases, specialized classes in science are offered as electives during the junior and senior years.

b. For a number of years, there has been a gradual trend toward a more natural method of teaching the foreign languages. Frequently, when taken primarily to meet college entrance requirements, the two-year study of foreign language results in wasted efforts for most pupils. In the future, the amount of time devoted to such study is likely to be increased for those pupils who have an interest in the modern languages; then the study will probably begin much earlier in the life of the pupil.

c. As has been said before, there is a noticeable tendency to consider highly specialized vocational training as a function of the junior colleges and vocational schools, with possibly a beginning of specialization in the senior year of high school. This does not mean a decreased importance of the commercial, home-making, and industrial arts departments, but rather a changing concept of their function. Each of these areas has much to offer which should be a part of the general education of pupils. The ability to use a typewriter is rapidly becoming desirable for nearly all pupils, while modern home conditions make home-making experiences of vital importance to an increasingly large number of secondary-school pupils. The so-called exploratory and introductory functions of the above areas of the junior high-school curriculum have changed, or are changing, to that of general education.

d. In the health area, two trends are becoming more and more apparent. One is the increased emphasis throughout the whole school upon the development of wholesome mental attitudes, often termed mental hygiene; the other is the tendency to fuse much of the informational phase of the health program with science and the social studies.

e. One cannot close a discussion such as this without mention of the consideration being given at the present time to the development of reading ability. For years we have considered the teaching of reading as primarily a function of the elementary grades, even to such an extent that most junior high-school teachers find themselves totally

unprepared to guide pupils in remedial and developmental reading activities. In the past few years, most teachers' colleges and universities have offered classes for secondary-school teachers in the teaching of reading. Many books are being published on how to improve one's reading and on how to teach reading. Special classes in remedial reading are now a part of the program of many junior high schools, and developmental reading is being emphasized as a function of all classes where reading is a major activity.

This discussion is admittedly sketchy, and many of the statements are entirely too dogmatic. Nevertheless, it is important to realize that the junior high-school curriculum is being affected by the same psychological, philosophical, and social considerations which are making all units of the public-school system of to-day dynamic factors in the development of well-integrated individuals and in the improvement of the social order.

The February Convention

The twenty-third annual convention of the Department of Secondary-School Principals will be held in Cleveland, Ohio, February 25-March 1, 1939. Hotel Cleveland will be the headquarters. An outline of the four-day program follows:

February 25—Saturday: The dinner meeting.

February 27—Monday afternoon: Student activities program, conducted by Elbert K. Fretwell, Cleveland high-school students participating.

February 28—Tuesday afternoon: Reports from the Planning Committee, Implementation Committee, and Discussion Group Projects, followed by a business session of the Department.

March 1—Wednesday afternoon: Junior high-school, senior high-school, and junior-college sessions, meeting separately.

NEW PATTERNS FOR JUNIOR-COLLEGE CURRICULA

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The junior college as a part of the public secondary-school system has made a noteworthy development of a thirty-six per cent increase in the number of junior colleges and 170 per cent increase in enrollment in them during the past ten years. At the close of 1937, there were 553 junior colleges in the United States. Forty-four per cent of these were publicly controlled institutions and enrolled sixty-eight per cent of the 136,623 students in junior colleges. California, Texas, Iowa, in the order named, are states leading in the number of junior colleges. Only four of our forty-eight states are without junior colleges, privately or publicly controlled. Current trends in education and demonstrated needs in the social and economic life of communities throughout the nation point to the continued growth in the number of junior colleges and in the number of men and women enrolled in these institutions.

The junior college has developed rapidly because the educational needs of many people have thus been met successfully. The curricula in these junior colleges have been largely of the preprofessional and lower division university type and have continued the traditional academic preparatory curricula found in the traditional high schools. Without in any way detracting from the value of the services rendered by the traditional curriculum practices in junior colleges, it is the purpose of this discussion to suggest certain new patterns for junior-college curricula. These new patterns will serve more effectively great numbers of youth not interested in, or adapted to, the patterns provided by the older type of curricula. Youth who have splendid abilities, worthy characters, high ambitions, great latent powers for social, economic, and civic service, and enthusiasms that are ready and waiting to be captured for the promotion of community welfare.

Educational workers in any community considering the establishment of a junior college, or the extension into new areas, must determine the curriculum patterns that are to be followed. Shall old or new patterns be given major emphasis? How shall both types of patterns be provided successfully? Shall all youth be served?

¹See three recent publications. (1) "Youth Education Today," a National Education Association publication which is the sixteenth yearbook of the Department formerly known as the Department of Superintendence but now known as the American Association of School Administrators." (2) "How Fare American Youth," a report to the American Youth Commission of the American Council on Education. (3) "School Life" for February, 1938, a monthly publication of the United States Office of Education.

The public junior college has developed as a part of the secondary-school system of the state. It is the end of the formal institutionalized educational plan of the state for providing its citizens with a general education, liberal, civic, social, and vocational in its content. It has five functional services to perform:

(1) To provide preprofessional curricula, preparatory to university courses in the professions, arts, sciences, and literature.

(2) To provide courses or curricula that will give opportunity to students and faculty to determine adequately, from among those students who have university entrance deficiencies in subjects or grades or both, those who have the ability and aptitude to enter and to continue in preprofessional curricula and the university.

(3) To provide balanced vocational curricula, best described by the word "semiprofessional," to meet properly the needs of that great number of young men and young women who, by aptitude, interest, ability, and desire, wish to enter the occupational life of the community within approximately two years or less following high-school graduation.

(4) To provide a cultural center for the community by the extension of its services to those citizens who do not have opportunity to become regular full-time students at the institution under the usual hours and methods of administration.

(5) To provide an extra-class body of life experiences in the environment created by the junior college, based on a broad foundation of personal and social and civic welfare. This body of life experiences will contribute constructively to the development of a more stabilized maturity in emotional controls, in social adjustments, in civic interests, and in vocational activities.

New patterns for junior-college curricula can be introduced most effectively in the functional area of balanced vocational curricula, best described as semiprofessional. Here is the greatest opportunity for community service in the establishment and improvement of the junior college of to-day and to-morrow. Here will be found three times as many youth between the ages of eighteen and twenty-five years as are in the traditional preprofessional areas. Here will be found many occupations² in the economic life of the community that have standards for vocational competence considerably above those developed by high-school and trade-school training and yet different from those developed by the four-year college or university liberal-arts and professional training. Here is the opportunity to help youth to be a happier person, to be a better worker in his chosen career field, to be a better citizen in his community and to be more successful in every way in coordinating and integrating his knowledge, his life experiences, and his conduct. Here is democracy in education.

Recreational leadership is a curriculum which trains young men and women to take charge of public playgrounds and recreation centers. This is a highly competitive field as many university graduates

²Examples of semiprofessional occupations: (1) Agriculture. (2) Art in its industrial merchandising and advertising applications. (3) Business, including bookkeeping, banking, finance, business law, management, merchandising, and secretarial. (4) Assistants for dentists and physicians. (5) Home administration. (6) Dramatics for stage, screen and radio. (7) Electricity, radio and sound. (8) Aviation. (9) Civil and mechanical engineering. (10) Clerical library aides. (11) Music for radio, screen, and stage, including operatic roles. (12) Nursing. (13) Peace officers. (14) Photography. (15) Publications. (16) Recreational leadership and camp counseling. A survey of any community served by a junior college will disclose some of these as well as other occupations not named.

who are qualified as physical education teachers are applying for playground positions. Junior-college graduates who might reasonably expect employment must be outstanding in personality, skills, and qualities of leadership.

Those students interested in obtaining the camp counselor's certificate which is authorized by the Camp Directors Association are eligible for such recognition upon completion of the starred (*) courses in the following recreational leadership curriculum and upon recommendation by the instructors of these courses.

FIRST YEAR

Alpha Semester	Units	Beta Semester	Units
English 51 (Reading and Composition)	3	English 52 (Reading and Composition)	3
Biology 51 (Fundamentals)	3	Physiology 51 (General)	3
Physical Education 53 (Games of Low Organization)	2	*Physical Education 61 (Camp Crafts)	2
Civic Health 53 (First Aid)	1	*Physical Education 56 (Leadership of Club Activities)	2
Speech 57 (Public Speaking)	3	*Physical Education 57 (Theory of Camping)	2
*Drama 69 (Story Telling)	2	*Biology 62 (Natural History)	2
Physical Education 62 (Dramatic Games and Folk Dancing)	1	Physical Education 63 (Dramatic Games and Folk Dancing)	1
Physical Education (Two Activities)	1	Physical Education (Two Activities)	1
	16		16

SECOND YEAR

Gamma Semester	Units	Delta Semester	Units
Psychology 51 (Introduction)	3	*Physical Education 52 (Directed Practice in Community Recreation)	3
*Physical Education 51 (Principles of Community Recreation)	3	Sociology 51 (Introduction)	3
Physical Education 54 (Methods in Officiating and Coaching)	3	Political Science 50 (American Institutions)	2
*Library 65	1	*Physical Education 55 (Teaching Recreational Games)	1
*Drama 77 (Educational Dramatics)	3	Physical Education 59 (Teaching Gymnastics)	1
*Physical Education 10 (Health)	2	Physical Education 60 (Organization of Aquatics)	2
Physical Education (Three Activities)	1½	Elective	3
	16½	Physical Education (Two Activities)	1
			16

The task of providing, maintaining, and improving balanced vocational curricula of the semiprofessional type may be analyzed into four parts: first, the essential patterns for semiprofessional courses and curricula must be identified; second, the factors that are to be overcome in carrying forward the program must be recognized; third, factors that encourage experimentation and promise assistance in the development of plans must be utilized; fourth, a typical two-year curriculum must be materialized.

We may identify at least six patterns as essential for semiprofessional courses and curricula. These are:

1. Existing needs of young men and women must be specifically recognized, understood, and met. Youth rather than subject matter will guide planning. We know that youth of junior-college age desires to become vocationally competent.³
2. The method and content of the instructional program must be adapted to attain the objectives that were set up. There must, therefore, be introduced **skill** units and **vision** or appreciation units of instruction.

The "skills" units of instruction will not aim to train to a high degree of speed and accuracy one special skill for one specialized trade. They will aim to develop familiarity with a number of skills used by men and women employed in the selected occupations. These occupations are not single-track, blind-alley types. They are of the types that offer related fields and diversified opportunities for growth in and for continuous employment. Occupational **families** is a good descriptive term for these occupations. A core of skills is needed to get the toe hold so essential in getting employment in any given occupational "family." These core skills are basic skills moderately developed. They make it possible for the worker to be ready when confronted with employment opportunities. Because the potential worker has been trained to serve in an occupational family rather than in a single trade he is able to adapt himself to varying conditions. This adaptability permits the worker to retain more easily continuous employment. He does not have to retrain for new skills constantly as employment opportunities shift. The worker is then better able to get hold and grow in an occupational family that has been purposely selected and which utilizes to the maximum his interests, enthusiasms, and abilities.

Vision units of instruction and experiences supplement the skill units. They provide facts about the existing social, civic, and economic conditions and problems that the potential worker must understand. They aim to develop intellectual methods and skills for studying the needs and activities of industry, business, and public service. They aim to develop an adaptability in the potential worker that will help him to get along with his fellow workers and citizens. These units

³Vocational competence means "not the ability to step at once into an involved and intricate job but such capacity as will enable the worker to make a promising start in some recognized field of work." It includes also (1) the capacity to get along tactfully and intelligently with employers and other employees, (2) the ability to adjust to new conditions and to learn on the job, (3) sufficient skill to insure employment at whatever the bottom of the beginners chosen field may be. The above statement was made by F. T. Spaulding in an address at St. Louis, February 24, 1936, to secondary-school principals.

also aim to give an introduction to interests and activities that will give meaning, value, and direction to unoccupied leisure-time hours. They cannot be left out of any training program that has vocational competence as an objective. They will center about youth and his needs rather than on subject matter as such. Semester courses in these areas will be less intensive and more extensive than those of the old traditional patterns. They will present principles and broad vistas rather than research and detailed views. They will survey great areas of thought and human experience. They will provide comprehensive views rather than limited views. They will enlarge the horizon of the potential worker by removing old barriers set up by too minute time divisions of subject matter. They are not merely introductory courses preparing for further study in subject matter. They will provide the "airway" view rather than the "public highway" or "bridle path" view of current life problems. They will aid the potential worker in coordinating and integrating his knowledge, life experiences, and conduct.

3. The skills and vision units of instruction must be combined in determined proportions that will create a balanced vocational curriculum of the semiprofessional type. This may be done by the use of a 2-2-1 principle. For a total two-year course of study—two fifths will be made up of skill units—two fifths of vision units with the remaining one fifth selected from either type as determined by the interests, needs, and enthusiasms of the particular students. For any one semester of the course of study, a similar distribution of instructional units and life experiences will exist. The use of this 2-2-1 principle is a safeguard against a too narrow program of overspecialization in manual skills.

4. The conception of education as a continuous and lifelong learning process must be strengthened in the minds of the student and potential worker. The use of the words **terminal** or **completion** to describe new types of junior-college curricula is in conflict with the right approach to education to-day. They do not fit any better than if we applied the terms "completion" and "terminal" to our professional courses in senior college, university, and graduate schools. The use of such terms is also objectively incorrect as well as psychologically wrong. The potential worker soon discovers that occupational situations and standards are not static and that they cannot be described as completion or terminal situations. He finds that he is confronted by the necessity of keeping his education not a static thing but an organic force, living, growing, and adjustable to new situations, new problems, new needs.

5. Curricula of the semiprofessional type cannot operate in academic isolation from the community which stimulates the introduction of any given curriculum and which absorbs in its economic, social, and civic activities, the human product of that curriculum.

This academic isolation is avoided by community surveys on the needs of youth, by limited surveys on special occupational situations, and by the establishment of standing committees for advisory and cooperative purposes. Members of such committees will be selected from the occupational leaders and potential employers in the occupational family for which the given curriculum is established. The institution must also establish and maintain a coordinated placement service that will help to reduce the gap between its training program and the life experiences that the student and potential worker must meet when he withdraws or graduates from the junior college.

6. A new name plan by which to designate the groups into which junior-college students are classified should be used. The old name plan in which the terms **freshman** and **sophomore** are used should be discarded. A distinct personality can be given to the institution by the use of a new name plan. Students following every type of curriculum provided by the junior college can be unified in their activities and loyalties. Feelings of inferiority that may otherwise be readily generated can be counteracted by the use of a new name plan. A new dignity can thus be given to classifications. The new name plan used successfully at Los Angeles Junior College classifies students as **alphas**, **betas**, **gammas**, and **deltas**, on the basis of first, second, third, or fourth semester attendance or on the basis of the number of units for which credit is accumulated to apply toward graduation from the Junior College.

Careful consideration must be given to plans for overcoming those factors now in existence that tend to place effective limitations on the development of new patterns for junior-college curricula. These factors may be enumerated in part as follows: First, misconceptions exist in the minds of students, parents, and citizens about the major functions of a public junior college; second, there is a shortage of personnel prepared adequately to lead the way in establishing and maintaining semiprofessional curricula; third, students, parents, and public tend to follow and demand traditional patterns of college preparatory and preprofessional curricula; fourth, criteria for evaluating the service of the junior college have emphasized the academic and preparatory preprofessional function thus compelling the new institution to confine itself to old patterns; fifth, techniques for avoiding failures in the establishment of new patterns have not been clearly defined and aggressively followed; sixth, conceptions about the meaning of voca-

tional education, and pressures for its inauguration, frequently are too specialized, too rigid, and too exclusive of cultural units; seventh, confusion exists about the proper relationships between general education and vocational education. Success in overcoming these seven limiting factors will bring the junior college closer to the needs of youth and to the realities existing in to-day's life.

Educational workers are encouraged in their plans and efforts to experiment with new patterns for junior-college curricula by the existence of certain factors to-day. These factors may well become forces that will aid in establishing and extending the junior college and its new patterns as a minimum essential in the public educational system of the United States. Among these factors are the following:

- (1) There are many unemployed and out-of-school youths, eighteen to twenty-five years old, for whom new patterns in educational training plans need to be created.
- (2) The public junior college has developed to a status of maturity and, therefore, has a new freedom to experiment with new curriculum patterns, and to extend its service into new areas of community life.
- (3) Employment trends in economic life of our communities to-day point to an increasing demand for more training, more maturity, and more stability on the part of the potential worker before he enters upon occupational employment.
- (4) Notable achievements and success have been attained by some junior colleges that have elected to go forward as pioneers into new frontiers. These results are available for the use of others in guiding plans and experimentation.⁴
- (5) Social and civic conditions in our various communities to-day also join other forces inviting leadership to establish new horizons in educational plans, to provide new patterns for junior-college curricula, to extend enlarged programs of educational service into new areas of community life.
- (6) Current experimentations and achievement in revised curricular practices in high school throughout the United States make it imperative for the junior college to move forward and to coordinate its work for an educational program that has continuity.

With many forces pointing to the continued growth and development of junior colleges in numbers and in enrollment, there exists to-day an unparalleled opportunity for those devoted to youth, education, and democracy to inaugurate and put on a functioning basis new patterns for junior-college curricula.

⁴A catalogue and other printed material descriptive of the semiprofessional curricula at Los Angeles Junior College may be secured upon written request to the College.

MODERN CLASSROOM TECHNIQUES IN THE SECONDARY SCHOOL

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This paper deals briefly with the most widely used technique in the high school of to-day—the textbook method; it refers in passing to the most significant innovating practice in the field of method as reported in the National Survey of Secondary Education; namely, the use of the unit assignment; and finally, it presents the thesis that the most serious defect of the modern high school on the side of methodology lies in its utter failure to provide adequate experience in using the three distinctive modern methods of investigation, the historical method, the scientific method, and the mathematical method.

It is interesting to note that the classroom techniques of the modern cosmopolitan high school are still determined by the makers and publishers of textbooks, workbooks, and laboratory manuals. While passing years have seen high-school enrollments increase many fold; while modern, well-planned high-school buildings have come to dominate the architecture of every hamlet and city in the land; and while teachers colleges and schools of education have granted bachelors and masters degrees to tens of thousands of candidates; the textbook method has held its own. In a recent study reported by Thomas H. Briggs in the **School Review** for December, 1935,¹ the results of visits to 104 classrooms in thirty-two public high schools in New York City and several near-by suburban cities are given. The teachers visited were designated by their principals as the best teachers in their respective subjects. Only nineteen, or eighteen and three-tenths per cent, of these "best teachers" had departed from conventional teaching from textbooks. "All the others," says Briggs, "were doing what thousands of teachers who follow their textbooks are doing daily throughout the country."

How shall we account for the persistence of the textbook method in spite of all the philosophers of education, all the educational psychologists and all the lecturers on method? Is it, after all, the best method? To this question the findings of our modern army of research workers give no answer. A careful examination of the numbers of the **Review of Educational Research** dealing with methods at the high-school level fails to discover any conclusive evidence. In

¹"The Practices of Best High-School Teachers," Vol. XLIII, pp. 745-52.

fact, the committee which prepared the first report on this subject, published in 1932, admits that the determination of the relative merits of comparable instructional procedures meets difficulties which seem insurmountable.²

Two factors, perhaps, are mainly responsible for the continued reliance on the textbook. The first is the inadequate preparation of many teachers who are teaching outside their fields of competence and of many others who possess, in fact, no fields of competence. The remedy for this condition rests jointly in the hands of the institutions which prepare and certify teachers and the administrators who select and assign them to their work. The second factor which operates to cause four out of five teachers in the American secondary school, if we may consider Brigg's sampling typical, to use the bare textbook method is lack of equipment. When the classrooms in a modern million-dollar school plant contain no classroom libraries and when study periods are regularly spent in study halls where no library facilities are provided, how can any activity involving the use of books be carried on save through the use of textbooks?

The National Survey of Secondary Education was deliberately planned to discover and report innovating practices. In the field of method, the most significant innovation of the last quarter of a century was found to be the use of the unit assignment. This technique has been developed experimentally in several centers and under at least seven different names. As Billett has demonstrated in Monograph No. 13 of the report of the National Survey³ these plans differ in name only. As he says, "The conclusion is inevitable that in practice differentiated assignments, long-unit assignments, individualized instruction, the contract plan, the laboratory plan, the problem method, and the project method are one and the same thing."

Evidence is lacking as to the extent to which the unit assignment is actually being used. Whether the publication of Billett's report in 1932 has resulted in any wider use of the technique of the unit assignment may be doubted in view of the fact that Briggs in 1935 failed to find a single one of his "best" teachers in the metropolitan area of New York using it. That it should be widely used seems clear to this reporter on modern classroom techniques. The teacher or principal who would like to use this new technique can do no better than to begin his preparation for using it by carefully reading Billett's

²Review of Educational Research, Vol. II, No. 1, February, 1932, page 6, in the Introduction signed by the Committee: S. R. Douglass, Carter V. Good, and Walter S. Monroe, chairman.

³Part II, "Plans Characterized by the Unit Assignment," pp. 227-382. See especially p. 330.

analysis of the Morrison plan, the Dalton plan, the Winnetka technique, and other examples of the unit assignment as he found it in use in various public and private high schools the country over.⁴

The so-called Morrison plan was used at the University High School of the University of Chicago. In this laboratory school Morrison carried on the experimental work over a period of years which resulted in the publication in 1926 of his book **The Practice of Teaching in the Secondary School**. In its revised edition, published in 1931, this book provides what is probably the best single source on the use of the unit assignment. It is interesting to note that the necessity of providing a combined study hall and library together with classroom libraries has long been recognized in this school. The Morrison plan requires books in the classrooms and study halls. The school refuses to enroll more than five hundred fifty pupils and provides on the average twenty books per pupil in the central library-study hall, a total of eleven thousand volumes, and another twenty books per pupil on the average for use in the classroom libraries, making a grand total of twenty-two thousand volumes.

In order to abandon the textbook method in favor of unit assignments, it may not be necessary to have books available in such large quantities; but no substitute for the textbook is likely to be found in a classroom where no books are available except the textbook, or in a school where study halls are separated from the library and contain no library facilities.

It appears that the American secondary school has utterly failed to provide adequate experience in using the three distinctive modern methods of investigation. These are the methods of investigation which have enabled our historians to reconstruct the past and interpret the present, our men of science to understand and to some degree to control the world we live in, and our mathematicians to construct what Keyser calls autonomous systems of thought.

The historical method, the scientific method, and the mathematical method are proposed as indispensable classroom techniques because of their instrumental values; because they are essential intellectual tools in the modern world. To know something about these methods of investigation without having actual experience in using them is superficial and inadequate.

The thesis here proposed is that modern classroom techniques are most seriously defective in that they make no provision for use of these methods. This thesis carries no implication that all teaching of history should be limited to practice in the use of the historical

⁴Ibid., pp. 237-356.

method, all teaching of science to practice in the use of the scientific method, nor all teaching of mathematics to the use of the mathematical method. It proposes only that these types of experience are indispensable in modern secondary education and should have some attention. To be sure, the teacher of history should be the one best qualified to guide the pupil in experiencing the historical method; the teacher of natural or social science should guide him in experiencing the scientific method; and the teacher of mathematics should guide him in experiencing the mathematical method.

As school administrators, we need to have a definite understanding of each of these methods of investigation. In the rest of this paper, I shall depend almost entirely on direct quotations or adaptations from three sources which have proved especially helpful to me during the past three or four years.

These sources are: (1) Fred Morrow Fling, **The Writing of History, An Introduction to Historical Method**, published by Yale University Press in 1920; (2) Morris R. Cohen and Ernest Nagel, **An Introduction to Logic and Scientific Method**, published by Harcourt, Brace and Co., in 1934; (3) Cassius J. Keyser, **Thinking About Thinking**, published by E. P. Dutton and Co., in 1926.

First, then, what is the historical method? It is, says Fling, "the process employed in the search for historical truth. The historian is concerned with tracing the unique evolution of man in his activities as a social being, the unique life record of humanity." Historical method, as he points out, may be distinguished from the method of natural science by noting that natural science uses common nouns to name its terms and arrives at generalizations whereas history uses proper nouns to name its terms and arrives at unique complex wholes. Natural science establishes its generalizations by experimentation. History reconstructs the past by using historical sources. These sources are of two kinds—**remains** or objects which man has produced, and **traditions** or records of impressions made upon human brains. In the modern world, the newspaper, the radio, the news-reel all combine to force us to pass judgments every day upon the truth or falsity of reports of historical events, to apply the tests of historical method in handling historical evidence. The recent journalistic venture in the monthly News-Letter dealing with "Propaganda Analysis" is only one indication of the value of a knowledge of historical method.

The insistence on the value of the use of sources in teaching history even in the elementary schools is best illustrated by reference to Henry Johnson's **Teaching of History in Elementary and Secondary Schools**, published by Macmillan in 1915. He says:

"The desirability of discrimination in dealing with historical data is too apparent for argument. Not all of us read histories, but all of us begin with the first dawning of intelligence to use facts known to us historically and not directly. . . . It is a commonplace that data historical in character enter into most of the thinking and planning of life from childhood to the grave. It ought to be a commonplace that schoolroom history should give the pupil some consciousness of what historical knowledge is and some training in the method by which historical knowledge is established."⁴

But can training in the historical method be given in the secondary school? On this point Johnson says:

"A first grade can be led to see that something is learned about the Indians from things dug up out of the ground, something from writings of white men who reported what they saw, and something from stories told by Indians about themselves and later reported by white men. First grade children will themselves often suggest that the Indians did not write books. . . . The greater part of school history must be presented as ready-made information, but . . . there should be illustrations of the historical method sufficient to indicate the general nature of the problems behind organized history, and sufficient to give some definite training in the solution of such problems."⁵

The second method of investigation is the method of science. This method, say Cohen and Nagel, "consists in the persistent search for truth; constantly asking: Is it so? To what extent is it so? Why is it so? . . . And this can be seen on reflection to be the demand for the best available evidence. . . . Scientific method is simply the way in which we test impressions, opinions, or surmises by examining the evidence for and against them. . . . In essence, scientific method is simply the pursuit of truth."⁶

Lacking the scientific method in the modern world, we can banish doubt and arrive at stable beliefs only by continuing to hold our beliefs because we have always believed them; or by appealing to some authority which we invest with infallibility and finality; or by resorting to self-evident propositions so obviously true that the understanding of their meaning will carry with it an indubitable conviction of their truth."

Quoting again from Cohen and Nagel:

"What is called **scientific method** differs radically from these by encouraging and developing the utmost possible doubt, so that what

⁴Op. cit., p. 358 f.

⁵Ibid., p. 360 f.

⁶Op. cit., p. 192.

⁷Ibid., Adapted from p. 193 ff.

is left after such doubt is always supported by the best available evidence. . . . Its method, then, makes science progressive because it is never too certain about its results." ¹⁹

"A recognition of what assumptions we are making and a readiness to consider all possible alternatives to them is the one outstanding trait of the method of science." ²⁰

"In general, the chief social condition of scientific method is a widespread desire for truth that is strong enough to withstand the powerful forces which make us cling tenaciously to old views or else embrace every novelty because it is a change. Those who are engaged in scientific work need not only leisure for reflection and material for their experiments, but also a community that respects the pursuit of truth and allows freedom for the expression of intellectual doubt as to its most sacred or established institutions. Fear of offending established dogmas has been an obstacle to the growth of astronomy and geology and other physical sciences; and the fear of offending patriotic or respected sentiment is perhaps one of the strongest hindrances to scholarly history and social science.

"Scientific method is the only effective way of strengthening the love of truth. It develops the intellectual courage to face difficulties and to overcome illusions that are pleasant temporarily but destructive ultimately. It settles differences without any external force by appealing to our common rational nature. The way of science, even if it is up a steep mountain, is open to all. Hence, while sectarian and partisan faiths are based on personal choice or temperament and divide men, scientific procedure unites men in something nobly devoid of all pettiness. Because it requires detachment, disinterestedness, it is the finest flower and test of a liberal civilization." ²¹

The very life of our society depends upon the acceptance of the method of science in dealing with social problems. To this end, the secondary school can make no greater contribution than to establish as a national habit of mind the scientific method in studying every question that concerns our social order. To be sure, the extensive use of scientific method in natural science would constitute no guarantee that social problems would be approached in a scientific spirit. Not only is it desirable, therefore, to provide experience in the scientific method in natural science, but such experience must be constantly provided in the classes in social science.

The third type of experience in methods of investigation which should be provided in the secondary school is the mathematical

¹⁹Ibid., p. 195.

²⁰Ibid., p. 415.

²¹Ibid., p. 402 f.

method. In his little essay entitled **Thinking about Thinking**, Casius J. Keyser points out that postulational thinking or autonomous thinking, as he calls the method of mathematics, is a strictly modern activity. "Indeed," he says, "its very earliest outstanding achievement was produced only twenty-two centuries ago—hardly more than a yesterday in the long backward stretch of a half million years or more of human time." "With that achievement," he continues, "most readers have some acquaintance, for I am, of course, referring to Euclid's **Elements**. It is the most famous example of postulational thinking in the history of science."¹²

The fact that Spinoza failed in his attempt to construct a body of ethical doctrine by the method used by Euclid, as Keyser points out, proves only that the postulates of any science must be regarded as mere assumptions rather than as statements of fact. Similarly, the fact that most of the modern scientific doctrines which have been stated in the autonomous form have been in mathematics or physics by no means indicates that postulational thinking is available only in these fields. But it is certainly true that we little realize the nature and functions of this type of thinking. Keyser holds that it is, indeed, the kind which surpasses all the others in power and importance. He goes on to say, "It is so rooted in the nature of intellect that anyone having talents above the level of a moron's can be led into a fair understanding of it and be disciplined in a measure to follow its ways."¹³

This type of thinking is characterized by its form and its form is the If-Then form. "What is asserted and what is true is that, if the postulates are true, then their implicants are true."¹⁴

In every example of this type of thinking some terms must be undefined and some propositions must be taken for granted, that is, must be used without demonstration. The clear and cogent statement of any doctrine requires that the minimum number of undefined terms and undemonstrated propositions shall be used.

But the use of postulational thinking involved in stating a scientific doctrine is relatively uncommon, whereas its use in the detection of the postulates which underlie all of our empirical thinking is of universal value and should be "engaged in habitually and regularly as an essential part of our intellectual business from day to day."¹⁵ In all our opinions and creeds, in all our discourse, spoken or written, formal or informal, sane or insane, and in all our planning,

¹²Op. cit., p. 25.

¹³Ibid., p. 2.

¹⁴Ibid., p. 22.

¹⁵Ibid., p. 75.

organizing, managing and conducting of practical affairs and institutions, there is essentially involved explicit or implicit reference to postulates—reference, that is to propositions which, whether formulated or not, are consciously or unconsciously taken for granted.

"Suppose the generality of men and women were educated, as they might be, to realize the truth of that proposition keenly," says Keyser; "what would be the effect of it upon their thinking? Knowing well that wherever empirical thinking occurs there are hidden postulates to be discovered, would they be eager and alert to discover them and bring them forth from their hiding into the light? When seriously engaged in thinking upon an important matter would they habitually and insistently ask themselves: What are the propositions that we are taking for granted? What are the concealed postulates upon which the validity and the significance of our conclusions depend? They would do so, I believe, as soon as they discovered that the doing of it is the sole means for meeting certain of their most deeply felt needs; and the discovery is not difficult to make. It is fairly obvious that postulate detection is demanded by the most momentous of our rational desires: the desire not to be deceived—the desire to know whether the propositions which our love of wisdom or the exigencies of life require us to consider are true or false. It is not difficult to see, but it is very important to see, that when we are bent on ascertaining which of the two qualities belongs to a given proposition, we are in every case driven to the consideration of postulates and that when these are unknown, which is the usual case, they have to be discovered."¹⁶

"Postulate detection . . . is essential as a means to many good ends; it increases knowledge in all fields; it is a powerful instrument for doctrinal criticism; it shows us how hard it is to know, it fosters scientific modesty, discourages dogmatism, favors tolerance, and makes for the maintenance and advancement of good will in the world."¹⁷

In this paper we have dealt with three examples of modern classroom techniques in the secondary school: (1) The textbook method is the most widely used technique. We have taken for granted the desirability of finding substitutes for this technique, and have indicated the need for better-trained teachers and better-equipped classrooms and study halls. (2) The unit assignment is the most significant "innovating practice" in the field of method as discovered and reported in the National Survey of Secondary Education. We have pointed out the need for careful preparation by teachers and

¹⁶Ibid., p. 78 ff.

¹⁷Ibid., p. 90 f.

principals and for adequate classroom and study-hall libraries in addition to the central library if the technique of the unit assignment is to be used successfully. (3) The lack of provision for actual experience in using the three distinctive modern methods of investigation, namely, the historical method, the scientific method, and the mathematical method, has been described as the most serious defect of the modern high school on the side of methodology. It has been shown that every reader of the newspaper, the news magazine, the journal of opinion; every listener to news broadcasts and every person who sees newsreels in the motion-picture theaters needs to have a high degree of skill and an established habit of using the historical method in order to detect propaganda and arrive at reasonably accurate knowledge of the world he lives in. It has further been shown that the secondary school can make no greater contribution than to establish as a national habit of mind the scientific method in studying every question that concerns our social order. And in the last place, it has been shown that the detection of the postulates which underlie all of our empirical thinking should be engaged in habitually and regularly as an essential part of our intellectual business from day to day.

AN EVENTUAL DEVELOPMENT IN HEALTH EDUCATION

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It should be said at the outset that this paper will deal only with one of the two principal aspects of health education—health instruction. The other, health service, involving as it does the many and varied services performed or arranged for the child in school, will enter our consideration only as it inevitably must in dealing with a completely integrated program. We will, however, for these purposes, set aside a direct consideration of such matters as the physical examination, immunization campaigns, the healthful school environment, and the relation of the physician to the school program in order to approach the problem of instruction in its own right.

During the past 120 years, health instruction in one form or another has been carried on in our schools and colleges. It would seem that enough time has elapsed since its beginning to give us a perspective on it and perhaps to bring out certain central tendencies of organization and approach. Indeed it has. Since the introduction of the original seven lectures on hygiene given to Harvard freshmen in 1818, followed by the course in human anatomy in his senior year, at least one of these central tendencies has been manifest. The adult now, as then, assumes the position that he knows what the student ought to know and proceeds to organize the course in hygiene accordingly. Hygiene, in the early days, consisted of a small amount of applied knowledge from the great basic areas of anatomy and physiology; and the few human problems to which this knowledge was applied were chiefly problems of exercise, the venereal diseases, and the prevention of illness. In many places, it amounts to little more than that now.

For a hundred years, this process of choice was a rather simple one. The adult kept his eye on the developing fields of human biology. As new facts were discovered and new relationships were seen, these were given to the student in the form as close to the original nature of them as the student could assimilate. Thus the sympathetic nervous system was described in detail because a knowledge of it was thought somehow to affect the ability of the student to organize better his emotional life. When the name **sympathetic** gave way to **autonomic** the change was made; and the additional relationships to the glands of internal secretion were described, so that the student could learn something of the technicalities of body processes. When the purpose of the white cells in the blood was described, after long years

of investigation in the laboratory, the student was forthwith taught that they existed in two forms, the leukocytes and the lymphocytes; and from a knowledge of them, he was to gather some insight as to means of disease control and prevention. Likewise, the knowledge of the structure of the glomerulus, the alveoli of the lung, and the islands of Langerhans preceded his understanding of kidney disease, tuberculosis, and diabetes as personal or public health problems.

The reasoning was clear. Give the student a scientific background in the structure and function of his own body, and he will develop the ability to solve the multitude of personal and public health problems which will later beset him. The adult used his own judgment in selecting things to be learned. He knew the basic facts. It was left to the student to take them and apply them to his own life. The early courses in hygiene became heavily laden with anatomy and physiology, and, of course, the physiology requirement for the general student to-day has remained nearly the same for more than a century.

This adult-judgment-of-content technique set up perfectly the need for textbooks. Many have been written. No grade in school to-day need want for a textbook written by well-meaning authors who presume to know what is good for the youngster at any age and whose teaching is mainly good solid anatomy and physiology. To-day a teacher will write in the oft-repeated request, "Please recommend a suitable textbook for my ninth-grade hygiene class." And the professor need only turn to the publisher's catalogue or his own file and send back the name of the appropriate one. To fill out the picture you can imagine the rest. The class meets, the assignment is made, the recitation is held, and knowledge is amassed about the human body and "how like a machine it is!" At the end of the term, a final examination is given and the grades made up. At this point, one cannot resist the fair question, "How much bearing has this process had on developing the student into an effective, well-adjusted, self-contained life?" But that will be discussed later.

This adult-judgment process of selecting subject matter to be learned perpetrated the hygiene or the physiology course as its best vehicle. Schools and colleges everywhere put them in the curriculum where they remain to-day as an instrument by or through which the student is supposed "to come into increasing possession of himself and his powers." The whole process has come to be known as the direct teaching of hygiene. It is 120 years old and is still an important factor in the health education of the student.

There is another tendency, however, which is gaining ground daily and which may alter things somewhat. This tendency is a direct reflection of the twentieth century process in all of education to exam-

ine into life, particularly the life of the student, and to use the findings, the problems there discovered, as the substance of the curriculum. This problem-discovery technique has had a profound effect on health education. It has revitalized the whole purpose and nature of health instruction. A few years ago critics were despairing of the hygiene course. To-day, where student problems are made the substance of the teaching, there is new life. The vehicle may remain the same, a specific course in healthful living. It may not be necessary or desirable to change that; but the content, the material of the course alters considerably.

Certainly, to anyone who knows modern educational tendencies, this idea is not new. But to use the facts of human anatomy or physiology as material in explanation of a health problem rather than as the approach to them, seems exceedingly difficult to bring about. It is so easy to follow the traditional pattern. We have always been taught that way, and even now we prepare our professional teachers by giving them anatomy and physiology their first year to store away until later when problems in their profession bob up to be answered by this supposedly well-preserved body of basic knowledge.

The transition will come, nevertheless. There is too much evidence being piled up about the learning process and too much doubt about the efficiency of the older procedure in producing healthy, well-integrated persons to defer its coming forever. From the axiom, "People will not think vitally about a problem unless the problem is vital to them," have come the beginnings of research into the actual, the real health problems of students. Analyses of physical examination records show that compensating for an irremediable handicap is a real problem with some students. Analyses of morbidity and mortality tables show that to teach directly about tuberculosis and its prevention is psychologically desirable in the fifteenth or sixteenth year. Analyses of the same tables show that if the venereal diseases are to decrease as a personal and public health problem, the school must not shirk its responsibilities here; to teach something about these diseases in the early adolescent years is definitely necessary. Analyses of community or family life show problems of the availability and quality of food. Students may be malnourished not only because they do not know what to eat, but also because they may not be able to purchase the recommended balanced diet. A knowledge of the fact that proteins differ from carbohydrates because the former contain nitrogen, is of little consequence in this predicament. A more real and vital problem exists.

Of all the analyses which have been made in modern times, perhaps the most fruitful ones have been those of student questions about

their health. It seems strange that, in a hundred years, scarcely anyone thought to ask the student what he might like to know about his health; and what help he might need in solving his problems. Such analyses are being made now. Many schools are making their own studies; and when the curiosities of their own students are brought out into the open, the questions not only represent a refreshing and surprising kind of teachable material but they can be organized into lifelike and functional categories for teaching purposes. You may be sure these categories will not be the digestive, the excretory, the endocrine, nor the other vital systems of the body. They will, on the other hand be problems of the recreational life, of emotional control, of disease prevention, of eating, of love-making and friendship-forming, and of making adjustments to the difficult situations in life.

That sort of thing is real. It is germane to the life of the student. It is the life of the student. Take the evidence from all these analyses mentioned, make any others which investigate problems of living. Check them for completeness against each other. Validate them as real life problems. The end products will be data which can serve readily as the content of health instruction. Certainly human biology will be taught but the facts of anatomy and physiology will appear only in **explanation of a problem at hand**. The problem-discovery technique seeks the facts of student life from analyses of it and its environment and organizes the learning accordingly.

All of this discussion so far has dealt mainly with kind and quality of the learning experience. Education has to think eventually in terms of machinery. How is health instruction best accomplished? What organization of the school day or the school curriculum is best? These questions are already partially answered.

Originally a specific course using the direct approach was the vehicle used. This was, and is, a course known variously as physiology, hygiene, health education, or health instruction, depending on the terminology favored. It was, and is a reservoir from which applied knowledge about the science of living springs. It has been useful in the past, and it will probably remain as a useful and important tool in the eventual integrated program. It may not survive as a course unto itself, but its central idea, which is a direct and specific consideration of health problems, has many useful possibilities.

At the turn of the century, however, other things began to happen which led people in health education to believe that health information could be correlated with other areas of the curriculum. Health was seen to permeate all of living, thus all of the curriculum had something to do with health. Many of the curriculum areas were asked to explore thoroughly the possibility of working in some health

information. Correlation opportunities were visualized in every field. In home economics, the preparation of meals was a major consideration, and the health building properties of the balanced diet was an obvious correlation. In general science, the effect of climate on health and growth, or on disease processes, was no great labor to accomplish; and in physical education, the hygiene of exercise was readily expanded and made effective. Correlation seemed rich in its possibilities, and of course it is. There is a danger, however, that it will be overdone to the jeopardy of both the health material and to the host—as in the creation of horrible operettas centering around vitamins or milk bottles, or in spoiling the adventure of *Treasure Island* by dwelling too long on Stevenson's tuberculosis. But, nevertheless, the idea of correlation has been a good one and to the mutual advantage of the correlated parts.

The possibilities of correlation are definite but limited. Much of general science, biology, home economics, and physical education can be related to the real problems of healthful living. The two obvious drawbacks, however, are (1) the inability of the host areas to absorb all the health problems of the student, and (2) the fact that not all students enroll in all the areas of study where the different health problems are worked in. A plan for correlation of health with other parts of the curriculum plus a direct and specific attack upon health problems as such, is safer if a complete health education is to be approximated.

Even this combination, however, is giving way to still a third development in curriculum construction. It is known as the integrated program. An understanding of it begins with the dictionary definitions of correlation and integration. Correlation means the relation of parts to parts; of hygiene to general science, of hygiene to home economics, all parts of the curriculum. Integration means the relation of parts to the whole, and the "whole" means in this case, the whole child. The parts mean every part of the school experience, not just courses, but every single thing about the school from the temperature of rooms and the color of the walls, the personality of the teacher and the length of the day, to the laboratory experience in science and the books in the library.

The integrated program throws the child into the spotlight. It forces every influence in that school to measure its worth by its contribution to his best interests. It seeks to define his best interests, not in terms of his whims or fancies, but in terms of his demonstrable needs as a growing organism in a social environment. It begins its organization by agreeing on a set of objectives relating to child development. These objectives may be specific or general, few or many. It is only

important that they be clear and related to child development, and that they be agreed upon by the whole school staff as things to work toward. Some such objectives as these¹ may be agreed upon:

1. Physiological and structural maturity.
2. Knowledge of powers and limitations.
3. Social acceptance of and in the group.
4. Self-direction in work.
5. Independent or creative thinking.
6. Effective interest or curiosity.
7. Ability to organize—not only specific task but whole problem of living.
8. Social sensitivity and cooperation in work and play.
9. Intelligent tolerance.
10. Faith in intelligent methods.
11. Sense of proportion and of values.
12. Sense of security.

The next step then is to begin the laborious process of getting all the parts of the school program to relate to those objectives for the whole child. The school program itself must become a smoothly working cohesive whole influencing the child only for the best and with contradictions within itself eliminated as far as possible. There will be no teaching about how to avoid skin diseases, for example, while the school athletes are exposed to ringworm in unsanitary shower and locker rooms. There could be no teacher, domineering and fearsome, who would destroy the creditable efforts of others to foster self-confidence and courage. There could be no satisfaction from lessons on the prevention of disease if the morning inspection were omitted and an epidemic of measles allowed to run through the school. There would be no possibility of the physician withholding the facts discovered about the student on the physical examination, because of an alleged privileged communication, while the physical education teacher remained in ignorance of the handicap and offers a program contrary to this student's best interest, or while the girls' counselor did not know that the cause of study failure was dysmenorrhea. The school program itself will become an integrated whole. Its parts will all mesh. They will all have the same purpose—the development of the student.

What kind of organized instruction will be a part in this integrated whole? In the first place, the instruction will be based on discoverable problems of student life. The solutions to these problems will be steps toward the attainment of the objectives. The objectives themselves might become problems for consideration. The problems

¹Adopted from H. H. Giles, The Ohio State University.

used will allow for student investigation to arrive at the answers. No single textbook will suffice. A series of learning experiences which will include reading, discussion, and doing will require a greater variety of library facilities, greater freedom for out-of-school investigations, more debate and less authority in the teaching, and more active and interested participation in the learning process over all. The health problems up for discussion will all be demonstrably real. They will be problems of worry or of traffic safety, tuberculosis or cancer, premarriage relationships or athletics. They might even be problems of the candy bar or the beauty parlor. The learning will be functional not static. No pride will be taken in the amassing of anatomical knowledge. The names, in order, of the twelve cranial nerves may disappear from general consumption to appear only before the student of anatomy, as he specializes in his profession.

The integrated program will probably use the technique of direct teaching and of correlation and fuse them into its own pattern. There will, I hope, be some direct teaching done. It may not be called hygiene or by any other name. It may evolve into a common search upon the part of the biologist and the sociologist for the answer to some human problem. There is certainly nothing unfortunate about an attack directly upon human problems. In fact, the objectivity of the attack is wholesome. The progressive school can be progressive by insisting on its curriculum being centered not only for students on the world around them but also, in part, on the students in their world around them. Illustrating this point the incident is recalled of the progressive school where no direct attack was made on human health problems. On the contrary, learning about health was supposed to come through large science projects; and in one of them the students raised chickens, we were told, to learn, not only about hens and roosters, but also about the phenomenon of reproduction in all living things. It was hoped that by some process of deduction the students would learn about sex and its mysteries from the hencoop. During that same week, however, the faculty agreed to a conduct rule which forbade the students who ate their lunch at school to leave the school grounds at noon because there was evidence of promiscuous relations between the sexes on short automobile rides around the neighborhood! It would seem that the lessons from the study of the reproductive life of the fowl were tried and found wanting! To learn about human sex relations from a study of the birds, bees, or butterflies has always been a dubious procedure.

Correlation techniques will be used also in the integrated program. In fact, correlation will be so enhanced, so spread out that it will dominate the relationships of all instructors and all projects. All

the parts of the school program will be helpfully related to each other in order to attain the objectives of child development. And that relation of the parts is exactly what good correlation is.

This eventual development in health education is not beyond attainment. It is more complicated than it seems here because in this discussion no detailed account was given of the many health services which are performed for the students by school personnel other than the teachers. But the integrated program is attainable. It requires a personnel trained in the functional biology of the human being, aware and understanding of social movements as they relate to the health of the individual, and skilled in the use of the best of educational method. It seeks to apply science to student life for purposes recognized and felt by the student. And it depends for its success upon the willingness of the many adults involved to make the student their first concern, regardless of what traditional compartments that may shatter, or what new administrative or teaching patterns it may establish.

IN-SERVICE TRAINING OF SECONDARY TEACHERS IN MINNESOTA

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The emphasis of modern educational philosophy on the society-centered school and the desirability of meeting child needs and interests gives added weight to the necessity for in-service training of teachers. While we have always considered such training important, it might be considered of less importance under a traditional classical curriculum where the subject matter of teaching is quite static and little attention is given to differences in interests and ability. The teacher stored up facts during her preservice training and then handed them out to the children year after year. But under a live functional curriculum, the teacher is continually forced to make adaptations in her material and practices as social changes create new needs and interests for the children. Preservice training for teachers is far from perfect and even if it were, continued growth on the part of teachers would still be necessary.

The present trend in curriculum building is to provide general outlines or guides for the teacher and to encourage her to utilize community resources wherever possible as a point of departure for educational experience. Such added responsibility for selection of activities, evaluation of learning possibilities, and adaptation to individual differences requires teachers who are constant students of children and of the educative process.

An atmosphere of study and experimentation is especially necessary for the large body of beginning teachers who enter the profession each year. Every good administrator recognizes the paramount importance of selecting good teachers and keeping them stimulated to work with the children in a creative way.

The Minnesota Secondary-School Principals' Association, through its committee on the education of teachers, has attempted to survey the practices of Minnesota schools in furnishing opportunities for continued growth in teaching. A preliminary survey was sent to forty high schools to get a list of present practices. From this a check list was prepared and mailed out to four hundred high-school administrators, including the eighty-five members of the association, one hundred fifteen principals, and two hundred superintendents (in smaller schools), selected at random from the state educational directory. Forty-four per cent or 177 replies were received; eighty of the schools replying had an average enrollment of over three hundred, and ninety-seven had enrollments under three hundred. The average enrollment

for all was 507, the median 273, the mode between one hundred and two hundred, and the range of enrollment was fifty-two to twenty-two hundred in the high schools reporting. The replies were proportionately distributed among the four-year high schools, junior high schools, senior high schools, and six-year high schools.

A tabulation by types of schools showed no divergence of practice among the different types of organizations, but a tabulation by sizes of schools showed slight differences in practice for the larger and smaller schools as will be indicated elsewhere in the report. The reliability of the reports may be questioned, but several checks were thrown in to get answers to the same question in several ways. Principals were asked to report only for the year 1937-38.

Common Practices Used for In-Service Training

In answer to the question, "What methods for improving instruction are reported to be used most frequently?" the following were reported as the model practice (Often, those used most often; some, those used sometimes; and best, those judged to be the best of the ones tried):

	Per cent of 177 cases		
	Often	Some	Best
General teachers meetings	73	21	36
Classroom visits by supervisors	57	23	43
Conferences with supervisors	49	18	42
*Required lesson plans	72	9	32
Improve extra-curriculum work	54	27	32
Teachers help select texts	66	21	23
Teachers select library books	68	14	25

In answer to the question, "Do you hold individual conferences with teachers?" ninety-four per cent reported that they did, the largest per cent after visitation by the supervisor. In seventy-two per cent of the cases the conferences were requested by the supervisor and in a smaller per cent of cases by the teacher, which indicates that such conferences are more popular with supervisors than with teachers. This agrees with evidence previously reported in other studies. In answer to the question regarding the topic for these conferences, sixty-seven per cent reported that merits of instruction observed was discussed most often, sixty-six per cent discussed improvements needed, forty-nine per cent of the conferences dealt with disciplinary procedures most often, and forty-one per cent often talked about the failure of certain pupils.

*In another phase of the survey, this question was asked in another form and seventy per cent said they required lesson plans.

In this study, the model teachers meeting was reported to be held at irregular periods of "on call" and after school hours. Sixty-six per cent of the meetings were attended by high-school teachers alone, fifty per cent of the meetings included both grade- and high-school teachers, while twenty-eight per cent were departmental meetings held chiefly in larger schools. Sixty-six per cent, the mode, of the reports showed that routine matters of administration were most often discussed, with supervised study ranking next in order of reported frequency, forty-one per cent.

In sixty-eight per cent of the schools reporting, the superintendent recommends teachers without consulting the principal, fourteen per cent consult the principal, and seven per cent of the school boards select without consulting either official. Failure of the superintendent to consult the principal is not confined to small school systems.

In answer to the question, "How often do you visit the teacher?" ninety-two per cent reported visits only at irregular intervals. Fifty-eight per cent sometimes advise the teacher of the visit, while thirty-three per cent never do. Under such circumstances, it is evident that cooperative improvement of instruction is not present. In seventy-six per cent of the cases, the supervisor studies pupil attitudes, sixty-seven per cent, methods; forty-nine per cent, discipline; and about an equal number, pupil interest and responses.

Forty-seven per cent of the reports indicated that intervisitation among teachers was encouraged but thirty-four per cent reported that they did not encourage such practices. Fifty-eight per cent reported that they recommend teachers for promotion within the system while forty-nine per cent reported they did not unless the teacher requested such a recommendation. A knowledge that one's services are appreciated, and that he will be promoted automatically for meritorious service would seem to be an excellent method of stimulating teacher growth; yet about half do not follow the practice. Seventy-five per cent recommend teachers for promotion outside the system even without the request of the teacher, but twenty per cent report they do not follow the practice. One may lose good teachers by recommending them to other officials, but the knowledge that teachers are being promoted will have a salutary effect upon those who follow in the system. It might be better to lose a good teacher occasionally than to keep her on the job continuously while she stagnates professionally.

Evidence of Progressive Practices

In two different phases of the survey, principals were asked whether or not they encouraged intervisitation. Forty-seven per cent reported they did. Nine per cent encouraged it often and fourteen per cent sometimes within the system. Seven per cent encouraged such

visitation often to other schools and twenty-nine per cent sometimes. A small percentage, eleven per cent, judged such practices to be among the best techniques for the improvement of instruction. The percentage would be low because principals were only asked to judge the merits of those practices tried this year.

Demonstration teaching would seem to be a highly commendable technique for the improvement of instruction. Two per cent said they used it often while only eight per cent used it sometimes. Yet the National Survey of Secondary Education reports the following:¹ "The main approach to the problem of improving instruction is no longer the classroom visit with its inevitable ensuing conference. That approach is still an important one, but in outstanding schools supervisors are realizing, as never before, the potential aggregate benefits which may accrue from many methods of supervision, proceeding simultaneously."² Melby found that principals were quite certain that classroom visitation was of value but the teachers were not so enthusiastic. The value of demonstration teaching seems to be quite evident to most leaders in education.³ Jacobson emphasized that there seemed to be a notion abroad that only elementary teachers could profit from such techniques. The writer is inclined to believe that the real reason why the practice is followed oftener in grade schools is due to the fact that elementary teachers had their training in a professional school where demonstration teaching is the vogue, while many high-school teachers were educated in liberal art schools and are not accustomed to giving demonstrations for their fellow teachers.

While some may question the writer's classification of what constitutes progressive practices regarding in-service training, many will doubtless agree that teachers are stimulated through the preparation of new curriculum material and experimentation. In several phases of the survey, principals were asked to report the use of such experimental procedures. In answer to the question, "What methods for improving instruction are used most often?" the following were given:

	Per cent		
	Often	Some	Best
Experimental study of a teaching problem	10	17	7
Investigate procedures in other schools	9	27	8
Develop directed study program	28	21	17
Develop guidance program	31	30	25

¹Engelhardt, Fred, Zeigel, Wm. H., and Billett, R. O. *National Survey of Secondary Education*, Monograph No. 11, U. S. Dept. of Interior, Office of Education, Bulletin No. 17, 1932, p. 140.

²Melby, E. O. "A Critical Study of Organization and Administration of Supervision—a Study of Current Practice," *Northwestern University Contributions to Education*, 1929, Public School Publishing Company.

³Jacobson, Paul. "The School Principal and Modern Supervision," *Bulletin of the Department of Secondary-School Principals*, N. E. A., Vol. 22, No. 72, February, 1938.

Develop home-room program	42	21	30
Study curriculum looking to revision	18	17	11
Adjust teaching to individual differences	30	31	23
Develop specific type of teaching as problem, project, etc.	14	14	8
Organize and select material for teaching	12	12	11

In view of the above information, one must discount somewhat the answers to the questions given below for another part of the survey. However, the conflict is not so great if you consider that the frequency of use is not given.

Do You —	Per cent	
	Yes	No
Encourage wide use of activities	77	10
Encourage experimentation	77	8
Encourage the large unit assignment	68	13
Encourage building curriculum units and trying them out	45	37
Urge use of local environment	82	3
Urge keeping in mind pupil needs	80	3
Use motion pictures	62	45
Use lantern slides	84	5

The evidence does seem to point to an effort to use the principles of progressive education in a considerable percentage of the schools, with varying degrees of success. Topics covered somewhat in teachers' meetings show the same tendency—some reported were "work done by outstanding teachers, demonstration by outsider, guidance, unit activities, differential assignments, integration of the curriculum, home-room activities, directed study, visual education, correlation of English with other subjects, safety education, use of radio, academic freedom, and democracy in school policies."

Thirty-two per cent of the schools report they issue regular bulletins, while sixty-five per cent say they do not. The greatest percentage of these bulletins merely deal with matters of administration such as use of the building, examinations, program of studies, care of building, holidays, requisitions, and the like. However, a few furnish references on problems being studied, and some deal with supervised study, visual aids, home rooms, changes in curriculum, radio programs, special projects, or activities worked out by teachers and the names of teachers who attended summer school.

Financial rewards in the form of a salary schedule are used by twenty-three per cent of the schools reporting. Properly administered such a technique, together with provision for sabbatical leave with all or part salary, would seem to be a very effective stimulus to teacher growth. Such practices are not common in our secondary schools.

those teachers who have been away from school for a period of years, money invested in the stimulation of additional study should bring good returns in the form of more effective instruction.

There is some evidence of the objective testing techniques being used to diagnose pupil difficulty, but many principals said little use was made of the material. One said he wondered why they gave the tests.

The in-service training of teachers constitutes one of the most important functions of the superintendent or principal if not the chief one. It should include the cooperative study of educational problems. One might suggest that desirable techniques would include the following:

1. Cooperative survey of educational problems.
2. Discussion of these problems in teachers' meetings and selection of those to be studied. A few activities would be selected for study during the year. It might include the development of new curriculum units.
3. Committees could then work on problems with the principal and discuss them in group meetings.
4. Bulletins might be issued giving material for study on the problem of the moment.
5. Demonstrations of the new units or methods would be given frequently.
6. Teachers might be sent where possible to see the work of others dealing with the same problem, the visit to be followed by discussions.
7. Where visits to the classroom are made, they are with the knowledge and cooperation of the teacher for the common study of the activity in operation.
8. Financial rewards for progressive efforts are always stimulating. The criteria of meritorious service is more difficult to develop.
9. Sabbatical leaves for study would help prevent professional deterioration. Added funds for this purpose may make the difference between stale stereotyped procedure and enthusiastic educational experiences.
10. Democracy in administration, cooperative planning by teachers, patrons, pupils, and supervisors will help meet child needs and stimulate teacher growth.

The value of the superintendent or principal is dependent largely upon his ability to secure good teachers and to keep them growing. The best teacher will become ineffective in a few years without an adequate in-service training program.

CUMULATIVE CASE STUDY RECORD AND GUIDANCE

H. Q. VAN DYKE

Superintendent, La Porte, Colorado

Four years ago at La Porte, Colorado, the teaching staff became convinced that the permanent office record cards were inadequate and failed to help in the guidance of the individual in the socializing process called education. The record system then in use contained the following information: personal, family, and scholastic history; record of attendance, health, and classification showing grade placement, promotion, or retardation. This seemed to the administration but a card index system in which there was no life nor human touch in which the individual was not recognized, and in which the record of digestion of subject matter was the great criterion. With the need for something better in mind, the staff attacked the problem as a major challenge; and, after two years of research, round-table discussions, committee findings, and constant study, a plan of permanent, cumulative case records was evolved.

Objectives of the Plan

The present plan has as its objectives:

First, a recognition of the child as an individual; every youngster has a right to the chance of attaining the highest plane possible for himself, and the teachers should contribute to this attainment in every way within their power. Subject matter is not the basis for, nor the purpose of, public education; but it is the function of the school to see that every individual shall be well fitted to social living and shall have an opportunity to be happy.

Second, a cumulative record case study in which teacher observation shall become the important factor in guidance for each pupil shall be carefully considered. Guidance is merely living together, and the teacher must be a constant observer and counselor in order to know the child and nourish him. That is education.

Third, through a careful study of each case, we hope to do this sympathetically, humanely, and with common sense. Teachers and administrators must be trained for this sort of work.

Fourth, a healthy program for each child that will consider not only what he has "had," but also his every need. Schools have sought to do something for youth through a routine process of administering compartmentalized doses of subject matter to each and everyone alike basing the criteria of success or failure in terms of units, grades, and credits; and they have been so busy with these that they have overlooked the physical and mental health of the child. In the field of

health, we have found a great need for study, observation, and remedial action; not merely a record of whether the individual has had measles, mumps, or scarlet fever, but how these have affected the child and how we might help him to overcome deficiencies. Other communicable diseases, underweight and overweight, malnutrition, eye and ear weaknesses and defects, throat and nose troubles, glandular disturbances, teeth, toxins, prophylaxis inoculations, vaccines, serums, diet, etc., were included in the study.

Fifth, through a personal knowledge of each child we shall try to help him find himself in the world of social, economic, aesthetic, and spiritual living, for now is the time to inculcate habits, attitudes, and appreciations. Each child is a social being; and unless the school becomes a factor in assisting him to find and develop himself, it fails to promote the civilizing process which society should demand for its own perpetuation, and which the individual has a right to expect as his heritage.

The Child as an Individual

Perhaps the child should not be regarded as an individual, but merely as a type. Perhaps he should find his individuality or develop it when he "gets out into life." On the other hand, if he is your child or mine, we probably want him to be considered as an entity, a something with a soul, an individual to be recognized as such, a personality to be cultivated.

No two of our pupils are identical physically; and if that is true, they are less likely to be identical mentally, emotionally, aesthetically, or spiritually. If society is to have the service of the individual, then society should help that individual to develop in the way that will best fit him for society. The whole is not better than its parts.

Guidance as a separate program cannot be set up in our public schools, but as an integral part of all school experiences and social living can be made worth while. This, we are finding, can best be done through recognition of each as an individual. Teachers should try to become acquainted with all their pupils both in class and out, and this should lead to home visitation, conversation in which pupil interest is predominant, consideration for all the differences that make for individuality, sympathy for pupil problems, and real comradeship that is breaking down the old barrier that has stood so long between student and teacher.

Cumulative Case Record

In following up the plan outlined above, the next step is recording the observations. This may be done by filling in certain data on the folder card or by inserting memoranda. The latter is proving to be more usable and is more popular with teachers who make the observa-

tions. In memoranda they can say fully and in their own words what they wish to say; whereas, merely filling in blanks either is not complete or tends to become trite.

I have chosen at random some items taken from the record of a boy whom I shall call by the name of James Gordon. James was graduated from the high school a year ago.

Activity record.—Football III-IV; Track III-IV; junior play, senior play, glee club III-IV; boys' quartet IV; student body president, IV; class president, III.

Family Relations.—James is a member of a cultured family consisting of himself, father, mother, and one brother six years younger than he. His father was formerly designing engineer for the International Harvester Company, and the family was in the best of economic circumstances. In 1929, Mr. Gordon contracted a tubercular trouble, and the family moved from Kansas City to La Porte for his health. From their savings a small fruit farm was purchased, and this, with fifty dollars a month from insurance has furnished the income for the family living. They have taken their loss in good spirits, and James has helped to carry on the work his father cannot do. The father is a talented musician and continues to do whatever he can to help with the music of the community. Mrs. Gordon is from an old southern family and never had done household work or physical labor before the trouble mentioned above. She has learned to do all anyone could do and uncomplainingly has reconstructed her whole scheme of life. The younger brother is an electrical genius. The family is highly integrated and is very closemouthed concerning its own welfare. Both boys are manly and well mannered and are very considerate of their parents.—Mr. W.

Sex Attitude.—October 15, 1935—James had his first real date last night at the all-school dance. He is certainly a manly fellow, and always seems to have an entirely wholesome attitude toward girls.—Miss K.

Civic Attitude.—James Gordon was elected president of the student body today. He has a constructive program for student development and social activities. His civic interest is of high order. We expect much of him.—Mr. W.

General Remarks.—James exhibited in the main corridor to-day a complete set of car models dating from the first car of 1897 vintage down to the ultramodern car of to-morrow. Fifteen models, all done in modeling clay. The exhibit practically stopped school. It is a marvelous piece of work and shows exact detail in every respect. An unusual feature of the display was a Ford V-8 engine block. It was all there.—Mr. L.

A week later, the display of car models which James worked out for the school, was obtained by an auto agency for the annual auto show in Denver. Thousands have viewed it with "Oh's" and "Ah's."

Later, James Gordon was offered a position with the General Motors Company as a result of his model car exhibit. He will enter Detroit University for technical training on a scholarship provided by General Motors.—Mr. W.

These are actual extracts from memoranda and observations, and the case history is a true one. Every boy and girl is so observed, although all have not the type of comment as was given in the case of this boy. However, teachers are doing many, many times as much work in guidance as formerly, and every pupil is carefully considered.

Testing and Guidance

If tests are to be given in order to find a score, they had better be burned beforehand. But through prognosis, diagnosis, and remedial action we find that every person in school can be helped to find his niche. Intelligence tests are used to help determine mental ability. Aptitude, personality, and achievement tests all contribute to an understanding of the boy or girl and help teachers in the orientation of the boy or the girl. Some teachers have become especially interested in clinics, and they are making a scientific study of the pupils that is

continuous. This will become far-reaching in its development. Here lies a new field in public school education that has scarcely been touched.

The Health Program

Although this problem seemed stupendous, we tackled it, nevertheless. Health is a prerequisite to successful school life and accomplishment, but it had hardly been considered when "grades" were given out. All must be regarded alike; do the assigned bookwork regardless of physical or mental health. Now we are trying to base our whole program on the fitness of the child to do the things he may be called upon to do. We are trying to develop a complete health program in which each youngster will be properly examined, treated, and cared for. Much has been done to eliminate malnutrition, glandular trouble, eye, ear, throat, nose, and mouth ailments. Teeth are to be kept in constant repair, diet watched if need be, exercises given in particular cases, etc. Vaccination, prophylaxis, and serum treatments have found a place in the health program. This costs more than the old hit-or-miss method, but much less to society as a whole; and there is no comparison as to results. Happiness cannot be measured.

Fitting for Leisure Time

This phase of the guidance program we are trying to develop to the best of our ability, but there is still much to learn. Each student of the school is observed, guided into new channels, carefully nourished in social growth; is introduced to the world of beauty, art, and culture; is led from the level upon which he was found to a place where life offers more than a living. We are finding our case study records invaluable aids. The records are alive. They breathe personality and warmth.

Conclusion

There have been times of discouragement. Teachers have failed to understand. There has been very little background for this type of work. There are far too few teachers, and they are poorly paid. Tenure is short and insecure, and new teachers have to be trained constantly in these studies and practices. Much of the work is too scientific for all. But with all these difficulties, we have made a start; and the joy of better teaching through a better understanding has been recompense enough. We have scratched the surface, and now we are ready to begin real cultivation.

BOOK NOTES

Youth Education Today. Sixteenth Yearbook. Washington, D. C.: American Association of School Administrators, 1938. Pp. 509. \$2.00.

A review of the educational and occupational problems of young people which suggests the next steps to be taken by educators in their efforts to help youth to find their places in our present-day social and economic order.

SIMPSON, RAY H. *A Study of Those Who Influence and of Those Who Are Influenced in Discussion.* New York: Teachers College, Columbia University, 1938. Pp. 89. \$1.80.

To determine the individual traits and background characteristics affecting influence in discussion and those relating to being influenced in discussion was the major problem of the study. A comparatively minor issue was to ascertain the extent to which students were influenced by opinions of experts in making their aesthetic judgments.

NORTON, JOHN K. AND MARGARET ALLTUCKER. *Wealth, Children and Education.* New York: Teachers College, Columbia University, 1938. Pp. xviii+138. \$2.00.

The authors present the results of important researches on the financing of public education in the United States and show the varying abilities of the states to support schools and the existing need for federal aid in maintaining a national program in line with current economic needs. This the second edition of the book comprises revisions and important additions including an account of the research conducted by President Roosevelt's Advisory Committee on Education.

POWDERMAKER, THERESE. *Physical Education Play Activities for Girls in Junior and Senior High School.* New York: A. S. Barnes & Company, 1938. Pp. xi+369. \$3.00.

Written principally to help women graduates in physical education as they undertake their first year of work, the book covers organization and administration, self-testing activities, games, coaching hints and technique for game skills, and swimming.

CASSIDY, ROSALIND. *New Directions in Physical Education for the Adolescent Girl in High School and College.* New York: A. S. Barnes & Company, 1938. Pp. xvi+231. \$2.50.

Intended as a guide for teachers in cooperative curriculum revision, the volume embodies a careful study of the problems of the girl of secondary-school and college age in relation to her environment, with particular reference to actual case situations, and it provides bases and methods by which teachers may study together and plan programs.

THORPE, LOUIS P. *Psychological Foundations of Personality.* New York: McGraw-Hill Book Company, Inc., 1938. Pp. xvi+602. \$3.50.

This book is a methodological treatise for teachers whose aim is the development of the child's personality. It discusses such things as the concept of personality, biological foundations of personality, educability of the personality, emotional conditioning of personality, etc.

STRATTON, CLARENCE. *To Read and To Act*. New York: McGraw-Hill Book Company, Inc., 1938. Pp. xii+411. \$1.24.

Thirty-three readings selected from the works of famous authors comprise the materials of *To Read and To Act*. The ultimate object of the book is: "to have pupils appear before their classmates, and with little or more action, make these scenes, prepared by careful reading, spring to life." For high-school pupils.

DAVIS, JOHN EISELE. *Play and Mental Health*. Principles and Practice for Teachers. New York: A. S. Barnes & Company, 1938. Pp. xvi+202. \$2.50.

The author presents principles and practices "as usable material for the organization of effective mental hygienic practices in school and, to this end, to develop a psychology of play in line with the spirit and the recent advances of psychiatric practices in child education."

Educational Broadcasting, 1937. Edited by C. S. Marsh. Chicago: The University of Chicago Press. Pp. xvi+386. \$3.00.

The Proceedings of the Second National Conference on Educational Broadcasting contains discussions by educators, government officials, journalists, radio broadcasters, musicians, and representatives of social agencies on subjects emphasizing radio as a democratic institution.

The Purpose of Education in American Democracy. Washington, D. C.: Educational Policies Commission, National Education Association, 1938. Pp. 137. Sixty cents.

The Educational Policies Commission believes that the thesis "our education needs democracy" is as important as the frequently proclaimed one "our democracy needs education." Accordingly, the Commission has set forth: (1) a statement of what the schools of the United States should accomplish; (2) a description of what should be done if these purposes are to be realized.

DOUGLASS, AUBREY A. *Modern Secondary Education*. New York: Houghton Mifflin Company, 1938. Pp. xviii+782.

A revision of the book *Secondary Education* which reviews the changes that have occurred in secondary education within the past few years, and which restates the aims, means, and purposes of the secondary school in the light of the needs of all the children of all the people rather than the needs of only the academically-minded intent on the pursuit of older forms of learning. The problems include pupil interests and abilities, home environment, civic needs, probable vocational destination, health, extra-curriculum activities, and intelligent use of leisure, to mention only a few.

MENEFEE, LOUIS ARNOLD, AND CHAMBERS, M. M. *American Youth*. An annotated bibliography. Washington, D. C.: The American Council on Education, 1938. Pp. xii+492. \$3.00.

If you are looking for articles on youth movements, on what youth is thinking and doing, on the relation between education and recreation, and on the outlook for rural youth, etc., this volume will prove an invaluable guide.

SEARS, JESSE B. *City School Administrative Controls*. New York: McGraw-Hill Book Company, Inc., 1938.

The author presents an impersonal approach to the scientific study of school control, the theory and principle of legislative and administrative control, board regulation, special administrative instruments, and pupil management controls.

JONES, ARTHUR J. *The Education of Youth for Leadership*. New York: McGraw-Hill Book Company, 1938.

The author analyzes the qualifications of leadership and contributes a valuable guide for the intelligent selecting and training of leaders.

MANN, ERIKA. *School for Barbarians*. New York: Modern Age Books, Inc., 1938. Pp. 159. Fifty cents.

Erika Mann, the daughter of the exiled Thomas Mann is well-fitted to expose the cunning machinations, the political propaganda, and the sinister system of education which has subjugated the German schools to aid the Führer in the accomplishment of the Nazi aim: to make the Nazis the rulers of the world.

SHEDD, CLARENCE PROUTY. *The Church Follows Its Student*. New Haven: Yale University Press, 1938. Pp. xvii+327. \$2.50.

Formerly, when students attended their own denominational schools, the church ministered to their spiritual needs without much effort. Later, however, when students began attending the various tax-paying institutions, the churches were faced with the problem of having students scattered in undenominational schools. Accordingly, the author gives the history of what the churches have done, and what they are doing, in looking after their students.

BRIGGS, THOMAS H. *Improving Instruction: Supervision by Principals of Secondary Schools*. New York: The Macmillan Company, 1938. Pp. 587.

The meaning and the organization of supervision, school principals' responsibilities and relationships, the process of supervision for improving instruction, classroom observations, supervisory conferences, teachers' meetings, as well as other means of supervision, measurement, and experimentation, are discussed by the author.

BETZ, WILLIAM. *Algebra for To-day*. Second course. Chicago: Ginn and Company, 1938. Pp. x+518. \$1.36.

CLARK, JOHN R.; SMITH, R. ROLLAND; SCHLORING, RALEIGH. *Modern-School Geometry*. New York: World Book Company, 1938. \$1.36.

MEIER, W. H. D., AND SCHOEMAKER, LOIS MEIER. *Essentials of Biology*. Boston: Ginn and Company, 1938. Pp. vii+725. \$1.80.

BECKER, CARL L., AND DUNCALF, FREDERIC. *Story of Civilization*. New York: Silver Burdett Company, 1938.

HAGGERTY, MELVIN E., AND SMITH, DORA V. *Reading and Literature*. New York: World Book Company, 1937. Volumes I and II.

NEWS ITEMS

BRING CRIMES INTO CLASSROOMS. United States Commissioner of Education Studebaker urges the rearrangement of high-school and college schedules to enable students to hear firsthand the most important pronouncements being made by history-making leaders. Mentioning recent foreign broadcasts in which Prime Minister Neville Chamberlain and Reichsführer Adolph Hitler were heard and other news releases portraying up-to-the-minute changes in world history as having real educative value, Dr. Studebaker said: "Our democracy depends not so much on the number of facts our students remember about Victoria or Napoleon, but upon how competent young people become in thinking through the real issues they themselves are going to confront as adult citizens."

NEEDED: COURSES IN PERSONALITY ADJUSTMENT. Lessons in human relationship are needed in every school in America, in the opinion of Elsie Robinson, syndicated feature writer, who says: "Under our present system, a youngster is taught practically everything on earth save the one requisite for a happy life—*how to get along with other people*. Each year sees new novelties added to the curriculum: tap dancing, flower arrangement, window trimming, endless devices for enriching one's personal store of information and catching the elusive penny. But where will you find a class on that most indispensable of all human arts—*how and when to keep your mouth shut?*" Yet," says Miss Robinson, "it is a safe bet that more careers have been crippled by ignorance on this subject than by all the other handicaps put together."

"To FREE HIGH-SCHOOL STUDENTS FROM THE TRADITIONAL CREDIT SYSTEM," is the plea to colleges made by Benjamin M. Steigman, principal of the High School of Music and Art, New York City. Mr. Steigman believes that a smattering of language and a bit of mathematics are futile to the boy or girl who intends to have a creative career, and he urges the adoption of purposeful guidance programs to replace the "aimlessness" now generally prevalent, aimlessness which, he says, is the worst blight of our schools today.

EDUCATORS AND BUSINESSMEN CONFER. Paul R. Mort, director of the Advanced School of Education of Teachers College, Columbia University, is developing a program of conferences between educators and leading businessmen and bankers for the purpose of healing the rift between education and business. The misunderstanding lies in the fact that professional educators have little contact with the people who foot the bills for education, according to Dr. Mort, who says: "The educators don't know what the public wants from the schools, and the laymen, in turn, are equally ignorant of what the educators hope to accomplish."

A NEW TYPE OF REPORT CARD FOR CHILDREN rating personality and traits of character is to be introduced this year in the elementary schools of Brooklyn, Queens, and Richmond, New York. Thus parents will get a report on the "whole child," his reaction to play and his work characteristics.

MENTAL HYGIENE IS A METHOD NOT A SCIENCE, according to Elizabeth T. Sullivan, educational psychologist of Los Angeles County Schools, in an article, "Mental Hygiene," in which she points out that at the beginning of the century the term *mental hygiene*, which means the best mental condition in everyone, was unknown. A great deal is said about mental hygiene to-day because it plays an important part in the development of children. As a method, mental hygiene utilizes the generalizations from all fields dealing with human behavior.

SURVEY REVEALS INADEQUATE PREPARATION OF TEACHERS. Educational policies Commission reports that, with the great shifts in population, new types of personnel must be met. Data from the National Survey of the Education of Teachers show that teachers are not adequately prepared for their jobs. This is true to a greater degree in the rural communities than in the villages and cities. In different-sized communities, the proportions of teachers having less than two years of college education were as follows: open country, one- and two-teacher schools, sixty-two per cent; open country, three- or more-teacher schools, twenty-eight per cent; villages of less than twenty-five hundred population, twenty-one per cent; cities of twenty-five hundred to 9,999 population, twelve and six-tenths per cent; cities of ten thousand to 99,999 population, ten and five-tenths per cent; and cities of more than one hundred thousand population, nine per cent. Yet the present population trends indicate that the future population of our cities is coming from the very communities served by teachers who are least qualified to teach, and who receive lowest remuneration.

TRENDS IN HIGHER EDUCATION, NEWER ASPECTS OF COLLEGIATE EDUCATION, by Kathryn McHale and Frances Valiant Speck, discloses the trends in higher education. The booklet should prove useful as a study guide to boards of instruction and curriculum committees in colleges, and to branches of the A. A. U. W. and other organizations that are studying educational standards and trends and that are carrying on guidance programs.

AMERICAN EDUCATION STRIVES TO ADVANCE DEMOCRACY. That American education is making strides toward meeting the needs of democracy is evidenced in (1) the transformation of courses of study, (2) introduction of new types of courses built to survey broader fields, and (3) concentration on each student as an individual rather than as a "standard particle of a mass." These hopeful signs were enumerated by Donald P. Cottrell, of Teachers College, Columbia University, in an address entitled "Redirecting General Education in High School and College," given recently over the radio.

REPORT CARDS FOR TEACHERS. In Fairbury, Nebraska, the teachers were given report cards graded by parents of senior students, and most of the grades were "pretty good."

HIGH-SCHOOL PROGRAMS LACK UNITY. L. Thomas Hopkins, of Teachers College, Columbia University, declares that the present high-school program lacks unity since it is made up of a series of disjointed segments in a number of unrelated areas. Therefore, homogeneity, he states, is accomplished largely through social activities of the school rather than through regular classroom work.

NEVADA PRINCIPALS ORGANIZE. A department of secondary-school principals for the Nevada State Education Association, affiliated with the National Education Association, was organized recently with officers as follows: President—B. W. Wheatley, superintendent of schools, Ely; vice-president—Golden R. Tueller, principal of Storey County high schools; secretary-treasurer—Paul Thurston, superintendent of educational district No. 1 of Clark County.

TWO ALTERNATIVES FOR FARMERS. "Whether the farmers want the government to take over the land and divide it up so they can make a first-class living or whether the farmers themselves want to organize into large cooperative farm groups, are two future alternatives. The first is not the democratic form of agricultural improvement, but I am convinced, after years of research, that the future of agriculture lies in more efficient methods and farming of a large scale." This is the opinion of Jacob G. Lipman, of the Agricultural College of Rutgers University, as expressed recently in an address delivered at the annual meeting and Harvard Festival of the National Farm School in Doylestown, Pennsylvania.

CHILEAN FELLOWSHIPS FOR AMERICAN STUDENTS. Fellowships for United States students are offered by the University of Chile in return for courtesies which have been extended to Chilean students here. The Institute of International Education will administer these fellowships; and during the academic year 1938-1939, the Institute will have ten Chilean students studying in the United States.

VOCATIONAL HIGH SCHOOLS IN NEW YORK. In a paper entitled "New York City Trains for To-day and To-morrow," Franklin J. Keller says, "The twenty-four vocational high schools in New York City are bursting their walls to accommodate more than 52,000 pupils. If the space and equipment could be doubled overnight, the children would flock in the next morning to use it to capacity."

WOULD CURB "DEGREE CHASING." Edward F. Ahearn, president of the Board of Education, Hartford, Connecticut, addressing 150 educators in the Men's Faculty Club of Columbia University, charged that teachers seeking higher degrees have some pay schedule in mind rather than the pursuit of knowledge in the foreground. He said that a curb should be put on "degree chasing," for there are many teachers who neglect their classes while seeking these academic laurels.

EQUALITY OF OPPORTUNITY. George D. Strayer, of Teachers College, Columbia University, believes that education should be organized and financed so that every person from childhood throughout adult life would have equality of opportunity. He warns against centralization of education through too rigid a Federal control. He says, "To centralize the control and administration of education in the state or in the nation will lead to mediocrity and may result in the use of the schools for purposes of propaganda by groups temporarily in control of government."

A SPECIAL PEACE SYLLABUS. At the James Monroe High School, the Bronx, New York, a special peace syllabus has been introduced which outlines phases of peace education in such courses as arithmetic, accounting, art, English, biology, the social studies, and even typewriting. In the classroom, the subject of war and peace is brought into the daily lives of all the pupils. For instance, children in the arithmetic classes find their studies correlated with the "economic wastage of war."

LEARNING COMMUNITY CIVICS FIRSTHAND. Thousands of New York school children saw the sights of Gotham for the first time only recently as part of their community civics courses. The municipally-owned ferry-boat was the classroom, and a loud-speaker was the teacher.

THE INTERNATIONAL SCHOOLBOY FELLOWSHIP provides the auspices under which ten German students are now enjoying a year's study in nine American preparatory schools. The boys arrived on the *Deutschland*, September 30.

THE NEED FOR RURAL-SCHOOL-CONSCIOUSNESS. Since half or all the children attending elementary schools are in rural areas, there is no question of the great need for arousing interest in improving the conditions of instruction. Rural school children have as instructors the youngest, the most inexperienced, the most unstable, and the poorest trained and poorest paid teachers in the profession.

A CURRICULUM TO MEET INDIVIDUAL NEEDS. Instead of setting up a curriculum pattern in which all pupils must fit, Reading High School, Reading, Michigan, is reorganizing its curriculum to meet the need of individual students.

WINNETKA'S SUMMER CAMP. Last summer, the opportunity to benefit by camp activities was provided children who were unable to attend summer camps elsewhere, when, on June 21, the school doors of Winnetka, Illinois, were opened for a six weeks' camp program that included excursions, nature study, horseback riding, swimming, athletics, shopwork, handicraft, art work, folk-dance study, puppet making, dramatics, and a story hour. The children chose the subjects they liked. The camp was self-supporting, with tuitions as follows: For eighteen dollars, a Winnetka pupil could attend all day; for twelve dollars, half day; riding was five dollars extra, and swimming was three dollars extra.

SPEECH OF PROSPECTIVE TEACHERS TO BE EVALUATED. The Board of Examiners of the New York City schools has codified its tests in speech. A six-point scale to evaluate the speech of prospective candidates has been formulated. Each candidate must pass an oral English test. At the very top of this group will be those applicants seeking licenses to teach speech improvement, or as first assistants in English. At the other end of the list will be the category for shop maintenance men and teachers of trade and industrial subjects. In the four intervening categories will fall the majority of elementary and academic high-school teachers, assistants and special teachers.

A PARENT-TEACHER ASSOCIATION THAT IS DIFFERENT. The Stanford Mothers' Club, of Leland Stanford University, is an active organization that looks after students who run short of funds, and who need suits, overcoats, shoes, ties, shirts, sweaters, and handkerchiefs. This club also gives an annual Christmas party for students who are unable to go home for the holidays; and it also serves Thanksgiving dinner for those who must be alone at that time.

STUDENTS LEARN THE NEED FOR SAFETY RULES. A method found to be startlingly successful in the study of the history of land transportation was the operation of model railroads by model students. Students thereby learned the advisability of establishing safety rules and many things about the construction of trains.

REASONS FOR STUDENT FAILURES. A questionnaire drawn up by George J. Davidson, principal of the summer session, and William J. Shine, guidance counselor, of Erasmus Hall High School, Brooklyn, New York, asked two thousand boys, from more than fifty public and private schools why they were obliged to repeat courses in summer schools. About 150 said they had too many subjects to study; 130 said their failure was due to absence from school. Most of these admitted an indifferent attitude, that they had no particular goal in life. When asked how failures could be avoided the most typical answers were: "I could study more;" "I should pay more attention;" "I should ask more questions;" "Teachers ought to have more personality;" "Classes should be smaller."

A BASIS FOR RELIGIOUS VALUES IN SCHOOL WORK. The feeling that there can be no divorce of religious values from daily education is growing among school administrators and teachers. At the tenth conference of elementary school workers at Teachers College, Columbia University, last May, educators sought religious basis for school work. Those present were from the Protestant and Roman Catholic groups; they agreed on "a common ground for all believers that might be expressed in a 'love-thy-neighbor' policy."

THE NEED FOR A GAUGE IN SELECTING TEACHERS. Frank M. Rich, principal of Public School No. 2, Patterson, New Jersey, says that teachers' marks in examination may serve in protecting the schools against ignoramuses, but that there is little if any relation between skill in teaching and managing a roomful of youngsters and skill in putting down eloquent answers on an examination paper. The feeling that a superintendent may have a sixth sense or a hunch which enables him to select or reject applicants on a moment's conversation or by a glance at examination marks or a photograph, is one of the commonest delusions. When definite examinations and interviews can be designed as a gauge in selecting teachers, superintendents and boards may then be justified in choosing their teachers on the basis of interviews and examinations.

THE LEISURE ACTIVITIES OF TEACHERS. Reporting on the leisure activities of school teachers in New York, Jacob Greenberg states that the 588 teachers who answered his questionnaire have published 973 educational books besides 135 books of other kinds. How they spend the rest of their time, whether or not they spend it reading the books that they write, is not stated. At any rate, it would be quite impossible for the fastest and most persistent of readers, reading one book a day, Sundays and holidays included, to read the books listed in less than three and a half years.

RADIO EDUCATION IN OHIO. The Radio Division at the Ohio State University is concerned with stimulating and developing radio education in the schools of the state. The Division has carried on research seeking to evaluate radio broadcasts planned and produced for classroom use. A monthly periodical called the *Ohio Radio Announcer* lists the educational programs.

PARENTS TO LEARN OF SCHOOL OPERATIONS. The schools of Springfield, Missouri, plan to distribute to parents a comprehensive report telling how the schools operate.

NATIONAL MEETING OF STATE COORDINATORS

WALTER E. MYER

The Discussion Group Project of the Department of Secondary School Principals was given a decided impetus this fall, when the coordinators of the states met together in Chicago to consider common problems and to work out programs for the coming year. This conference was held on October 3 and 4, and every state of the Union except Rhode Island was represented, as was also the District of Columbia.

These forty-eight men, together with the staff of the national office of the Discussion Group Project, gave first consideration to problems of organization. All but twelve of the states were already organized locally and were ready to carry on the work of local discussion group conferences, most of them on the monthly basis. Regional directors had been appointed and state organizations were fairly complete. Plans were made at the conference for completing the state organization work in the other states, and that activity is now going forward. As one result of the conference, it is expected that within a few weeks principals will be meeting regularly in local discussion groups in practically all the states.

The coordinators' conference also considered the problem of future programs for discussion. During the last year, many groups have been discussing the "Issues of Secondary Education" and "Functions of Secondary Education," making use of the study outline, entitled "Problems of Secondary Education," which has been prepared and is being distributed without charge by the national office of the Discussion Group Project. It was the general opinion that discussion in most of the states might well proceed along the same lines, and that the attempt should be made to extend the discussions to the high-school teachers. Principals are being encouraged to devote part of their faculty meetings to professional discussion, the work being carried on along the same lines as those followed by the principals in their local meetings.

It was the opinion of the members of the conference that the discussion groups would soon be ready to shift emphasis from a consideration of the theoretical problems of secondary education to the proposed development of actual practices. The coordinators and their regional directors plan to work in close association with the Implementation Committee.

This Committee, sponsored by the Department of Secondary School Principals, and headed by Dr. Will French, of Teachers College, Columbia University, met with the coordinators in the final ses-

sion and outlined the program through which the Implementation Committee and the discussion group organizations may work together. It was decided that the Implementation Committee should send out a questionnaire to the principals of the nation, asking along which lines the principals were most in need of help and guidance. The Implementation Committee will be guided largely in its work by the replies which it receives.

The plan now is that the Implementation Committee shall discover and bring to light the most promising practices now being followed in the most successful schools. Attention will be given to the practices which seem effective as a means of handling the most difficult problems of the secondary schools and the problems with respect to which the most promising efforts may be made. The Implementation Committee will bring these effective and progressive practices to the attention of principals everywhere, and these practices may be given immediate and systematic consideration by the local discussion groups throughout the nation.

According to this program, the Implementation Committee implements and brings to concreteness the work of the Orientation Committee, and the Discussion Group Project furnishes the machinery by which the leadership afforded by these two committees may be made effective.

It was decided at the coordinators' conference that the discussion group work in each state should be a function of the state principals association. It is particularly important that a strong principals association be maintained in each state and that it keep the discussion group work going. The encouragement and guidance afforded by the national office of the Discussion Group Project is to be but temporary, and after the work of organization directed from national headquarters is complete, each state is expected to maintain the work within its own jurisdiction.

TALKING IT THROUGH

The Planning Committee of the Department of Secondary-School Principals of the National Education Association is anxious that the discussion group work which it has initiated may be maintained permanently in all the states and in every section of each state. It is anxious, further, that the discussions be carried on in a really effective manner. In order to assist in the effort to organize and maintain these discussion groups and to keep the discussion within them on a high plane, the Committee has prepared a booklet called "Talking It Through." This booklet is intended to serve as a guide for discussion groups.

"Talking It Through" furnishes information about the Discussion Group Project and its purposes. It offers counsel concerning the organization and maintaining of groups. Probably most important of all, it carries chapters on the art of discussion. It points to the dangers which beset any discussion group, to the danger particularly that the discussion may not result in real cooperative thinking. It then offers concrete suggestions concerning means whereby discussion may be so directed as to result in the kind of thinking and planning which plays so important a part in educational progress.

This booklet sells for 15 cents a copy, and may be obtained from the Discussion Group Project, 1201 Sixteenth Street, N. W., Washington, D. C.; or from Mr. H. V. Church, 5835 Kimbark Avenue, Chicago, Illinois.

CALENDAR OF PROFESSIONAL MEETINGS

- National Council of Teachers of English, Hotel Statler, St. Louis, Missouri, November 24-26, 1938.
- Association of Colleges and Secondary Schools, Atlantic City, New Jersey, November 25-26.
- Middle States Association of Colleges and Secondary Schools, Atlantic City, New Jersey, November 25-26.
- National Council for the Social Studies, Pittsburgh, Pennsylvania, November 25-26.
- Southern Secretaries, Dallas, Texas, November 25-26.
- American Vocational Association, St. Louis, Missouri, November 30-December 3.
- Ohio Education Association, Columbus, Ohio, December 27-29.
- Associated Academic Principals of New York State, Syracuse, New York, December 28-30.
- Massachusetts High School Principals Association, Boston, Massachusetts, January 14, 1939.
- National Vocational Guidance Association, Cleveland, Ohio, February 22-25.
- National Association of Principals of Schools for Girls, Cleveland, Ohio, February 23-25.
- National Association of School Secretaries, Cleveland, Ohio, February 25-26.
- Department of Secondary-School Principals, Cleveland, Ohio, February 25-March 1.
- Department of Rural Education of the N. E. A., Cleveland, Ohio, February 25-March 2.
- American Association of School Administrators, Cleveland, Ohio, February 26-March 2.
- National Association of State High School Supervisors and Directors N. E. A., Cleveland, Ohio, February 28.
- American Association of Junior Colleges, Grand Rapids, Michigan, March 3-5.
- Public School Business Officials, Oakland, California, March 15-18.
- The Harvard Teachers Association, Cambridge, Massachusetts, March 18.
- New York State Vocational Association, New York, New York, April 11-13.
- American National Red Cross, Washington, D. C., April 24-27.
- Conference of Principals of Junior and Senior High Schools, Boston, Massachusetts, April 28-30.
- Manitoba Teachers Federation, Winnipeg, Manitoba, Canada, April, 1939.
- District of Columbia Congress of Parents and Teachers, Washington, D. C., May, 1939.
- American Library Association, San Francisco, California, June 18-24.
- National Conference of Visual Education and Film Exchange, Chicago, Illinois, June 19-22.
- National Association of Student Officers, San Francisco, California, June 28-30.
- National Association of State Libraries, San Francisco, California, June, 1939.
- National Education Association, San Francisco, California, July 2-6.
- National Amateur Press Association, Oakland, California, July 4.
- World Federation of Education Associations, Rio de Janeiro, South America, August, 1939.

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